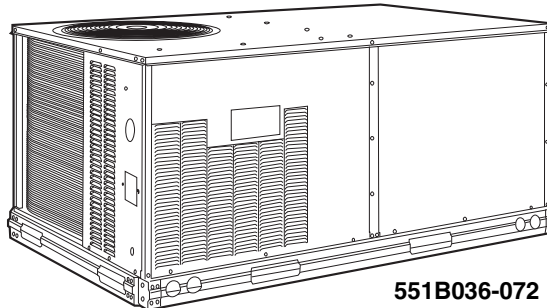


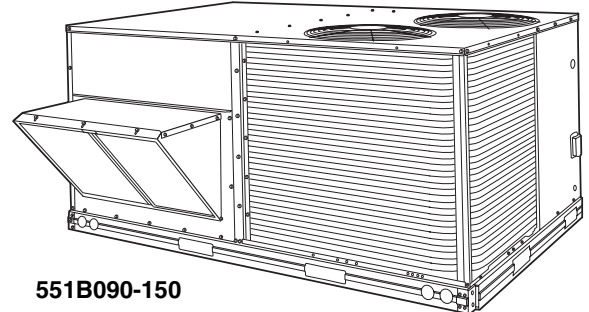


## COMMERCIAL SINGLE PACKAGE ROOFTOP ELECTRIC COOLING UNITS

**Model 551B**  
**DuraPac Plus Series**  
**Sizes 036-150**  
3 to 12½ Tons



551B036-072



551B090-150

Bryant has designed these units based on customer needs and requests to be the most efficient and reliable rooftop units ever made.

### FEATURES/BENEFITS

- Most efficient cooling in the industry using scroll compressors
- Full range of electric heat sizes available — exactly the right size for your needs.
- High reliability — non-corrosive condensate pans, pre-painted cabinets and primed interior panels, and all units are fully protected by internal safeties
- Quietest operation in the industry — all compressors mounted on independent vibration isolators. Standard belt-driven evaporator fan motors on all units
- Ease of maintenance achieved by standard size filters, optional direct digital controls, tool-less filter access, simple compressor access, permanently lubricated belt driven fan motors, optional disconnect switch, optional 115-v convenience outlet, and optional hinged access panels
- Perfect Humidity™ dehumidification package. This factory installed option improves the dehumidification capability of the rooftop unit and helps control humidity levels in the conditioned space.

**BRYANT MEANS TOP QUALITY AND RELIABILITY** — Each component utilized in these units is designed and tested for a minimum of 15 years operation under the harshest conditions.

Every unit is thoroughly run tested at the factory in each operating mode and evacuated prior to final charging. Every coil is leak-tested with helium particles. Automated run testing allows accurate undisputed tests and measurements which are second to none in the industry.

Each unit contains a factory printout indicating tested pressures, amperages, dates, and inspectors, providing certification of the unit's status at the time of manufacture.

Units are equipped with valuable safety controls designed to monitor and protect the unit for life. The standard safeties include:

- low-pressure/loss-of-charge switch
- high-pressure switch
- freeze-protection thermostat

- internal compressor overload
- exclusive Cycle-LOC™ circuit board that provides compressor anti-cycling
- refrigerant filter drier

The cabinet is constructed of galvanized steel, bonderized and coated with a prepainted baked enamel finish. The paint finish is a non-chalking type, and is capable of exceeding Federal Test Method Standard No. 141 (Method 6061) 500-Hour Salt Spray Test. In addition, all internal cabinet panel surfaces are primed, allowing the entire unit to have a longer life and more attractive appearance.

### EASY MAINTENANCE AND INSTALLATION

**All Units are Factory Shipped in the Vertical Discharge Configuration** for fit-up to standard roof curbs. (One accessory curb fits sizes 036-072; another accessory curb fits sizes 090-150.) The contractor can order and install the roof curbs early in the construction stage, before decisions on size requirements have been made.

**All Units Feature Roll-Formed Baserail** design with forklift slots on 3 sides of the unit and rigging holes for easier maneuvering and installation. Stretch-wrap packaging protects the unit during shipment and storage.

**Units are Easily Converted** from vertical to horizontal applications to make retrofit and add-on jobs easier. To convert from vertical to horizontal discharge, simply relocate 2 panels.

The same basic unit can be used for a variety of applications and can be quickly modified at the jobsite. Standard high-performance, belt-driven, evaporator-fan motors enable the 551B036-150 units to operate in most ductwork configurations.

**Ductwork Connections are Simplified** by the logical 2 to 1 aspect ratio. On vertical discharge units, ductwork attaches directly to the roof curb.

**Thru-the-Bottom Service Connection** capability allows power and control wiring to be routed through the unit basepan and roof curb (if installed), thereby minimizing roof penetrations (to prevent water leaks). Both power and control connections are made on the same side of the unit to simplify installation.

**The Non-Corrosive, Sloped, Condensate Drain Pan** is in conformance with ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers) Standard 62 to meet many Indoor-Air Quality (IAQ) specifications. The condensate drain pan offers both bottom and end drain capability

to minimize roof penetrations. The bottom drain can be used in conjunction with the thru-the-bottom connections. An external trap must be field supplied.

**Standard 2-in. Throwaway Filters** are easily accessed through a removable filter access panel located directly above the air intake hood; no tools are required to change the filters.

**All Units are Designed with a Single Continuous Top Piece** to eliminate leaking at the seams or gasketing.

**Belt-Driven Evaporator-Fan Motors on All Sizes** allow maximum on-site flexibility without changing motors or drives.

**Low-Voltage Wiring Connections** are easily made due to the terminal board which is conveniently located for quick simple access.

**Single-Point Electrical Power Connections** permit easier wire estimating and connections.

**Field-Installed Accessory Electric Heaters** are available in a wide range of capacities. Single-point wiring kit makes installation simple.

**QUIET, EFFICIENT OPERATION AND DEPENDABLE PERFORMANCE**

**All Units are Equipped with Scroll Compressors** that are fully hermetic with internal vibration isolators for extremely quiet and highly efficient operation. Compressors are mounted on an independent plate for additional sound integrity and structural support. Efficient condenser fan and motor design permits operation at low sound levels.

**Totally Enclosed Condenser Fan Motors** and permanently lubricated bearings provide additional dependability.

**All Coils Use State-of-the-Art Internally Enhanced Copper Tubing.** Coils are thoroughly leak and pressure tested at the factory. Condenser coils have louvered, aluminum lanced fins to provide maximum heat transfer for optimum efficiency and easy cleaning.

**Refrigerant Circuit Protection** ensures dependability. All units have standard:

- 1. Loss-of-charge/low-pressure protection switch which allows operation at lower ambient conditions while protecting against low-charge operation.
- 2. Freeze-protection thermostat, which protects against evaporator coil frost build-up.
- 3. High-pressure switch, which protects against above normal operating pressure.
- 4. Filter driers, which trap moisture and debris in the refrigeration system.
- 5. A fixed orifice metering system precisely controls refrigerant flow, preventing slugging and floodback, while maintaining optimum unit performance by metering the circuits individually.

**Two Independent Compressor Circuits** (all 090-150 size units) provide pinpoint comfort control, improved efficiency, and back-up capability.

**BRYANT CONTROLS ADD RELIABILITY, EFFICIENCY, AND SIMPLIFICATION**

**The Standard Control System** is readily adaptable to all conventional and programmable thermostats.

**Patented Cycle-LOC™ Protection System** provides protection against compressor cycling by monitoring compressor current. When a lack of compressor current exists, the Cycle-LOC circuit board locks out the compressors. Cycle-LOC may be manually reset by simply switching the thermostat to OFF, and back to the Cooling or AUTO modes. No use of the unit power disconnect switch is required.

**INDOOR-AIR QUALITY (IAQ)**

551B units utilize certain key features that assist in improving the quality of the building air. Sloped condensate pans eliminate possible biological growth in the rooftop unit. A face-split indoor

coil design (all 090-150 size units) proves effective in additional moisture removal from the supply air. Two-in. filters are standard in all rooftop units with an optional filter status sensor available.

**Another Optional Indoor-Air Quality (IAQ) Feature** for the 551B unit is the Perfect Humidity™ dehumidification package. This is a factory-installed option that provides increased dehumidification by cooling the hot liquid refrigerant leaving the condenser coil. The Perfect Humidity option consists of a subcooling coil located on the leaving-air side of the evaporator coil. The location of this coil in the indoor airstream enhances the latent capacity of the 551B units by as much as 40%. Many buildings suffer from humidity damage or poor indoor air quality due to humid conditions. The improved latent capacity provided by the Perfect Humidity option reduces the building's humidity, eliminating potential property damage and making the space more comfortable.

The Perfect Humidity option makes the 551B unit the ideal IAQ rooftop for hot and humid regions. The operation of the Perfect Humidity package can be controlled by a field-installed, wall-mounted humidistat, or light commercial thermidistat. The circuit activates only when needed (using the accessory humidistat) as opposed to some dehumidification systems that operate continuously. The humidistat can be set for any humidity level between 20% and 80% relative humidity.

**SERVICEABILITY**

**Servicing a Rooftop Unit has Never Been Easier** with the new factory-installed Hinged Panel Option. This option includes hinged access panels for the filter, compressor, evaporator-fan motor, and control box areas. These panels provide quick and simple access to the major components by simply unlocking and swinging open the different panels. Each hinged access panel is permanently attached to the rooftop unit, eliminating the problem of access panels being dropped and creating a hole in the roof (potentially causing a water leak). This type of damage could void any warranty offered for a new roof.

**Standardized Components** for the complete line of products are found in all safety devices, condenser-fan motors, and control boards. This allows for greater inventory control, familiarity, and fewer stocked parts.

**Easily Accessible Refrigerant Access Ports** on all discharge, suction, and liquid lines permit easy and accurate measurements.

**Resettable 24-V Circuit Breaker (Sizes 090-150)** allows room for error without replacing transformers or fuses.

**Single-Side Utility Connections** provide easy access to perform any necessary service.

**Color-Coded Wires** permit easy tracing and diagnostics.

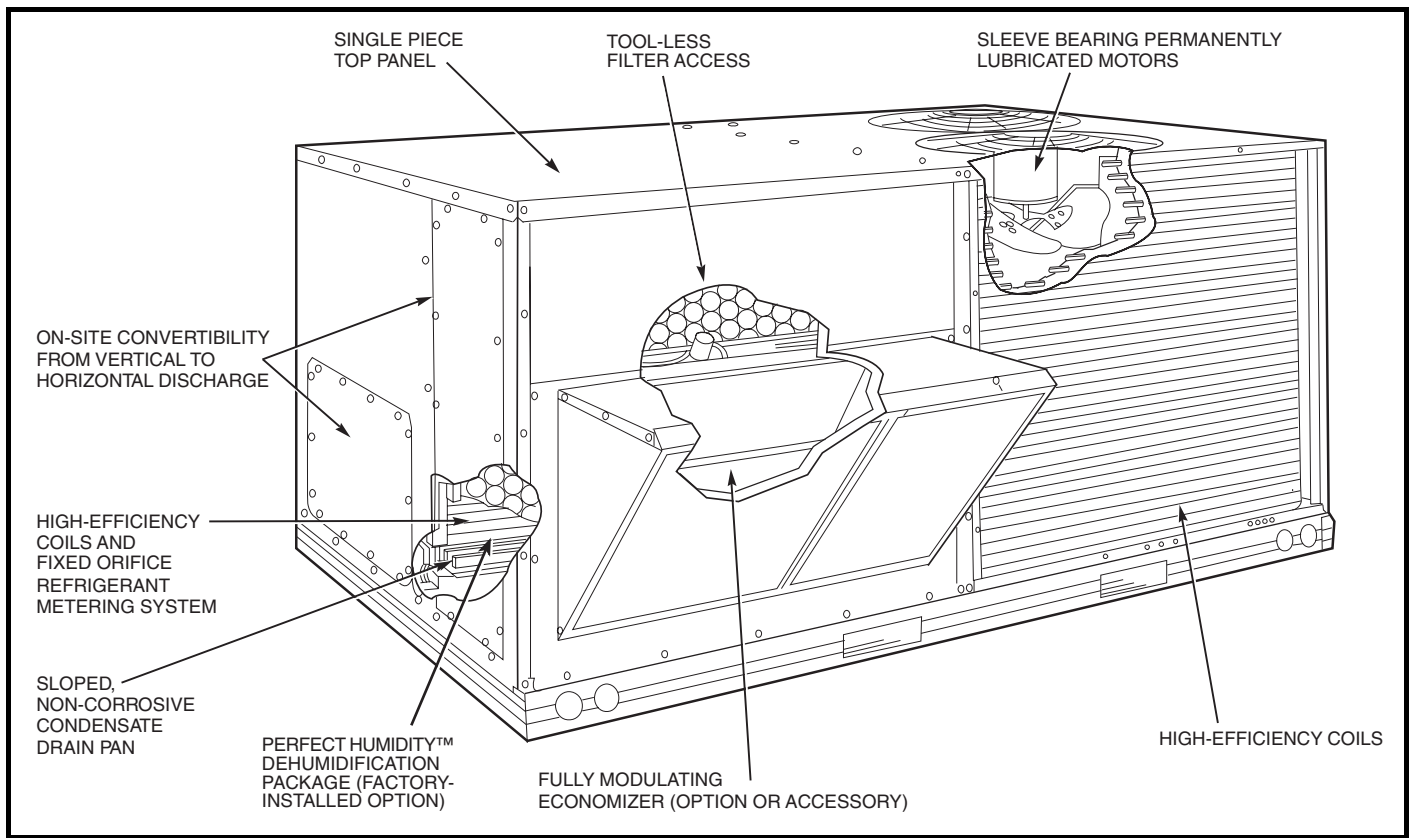
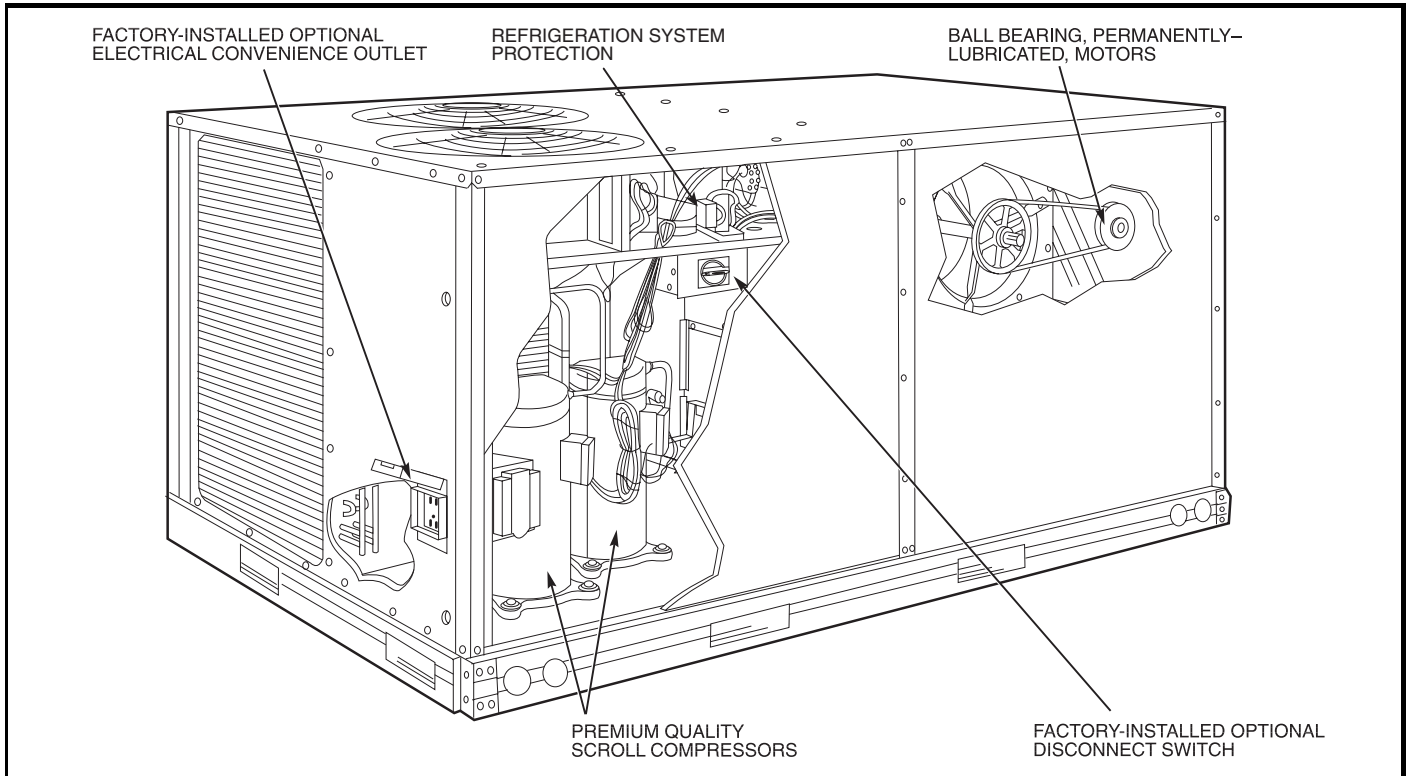
**Belt-Driven Motors** are accessible through a single access door to facilitate servicing and adjusting after installation.

**Compressors and Safety Switches are Easily Accessible** for troubleshooting and system analysis.

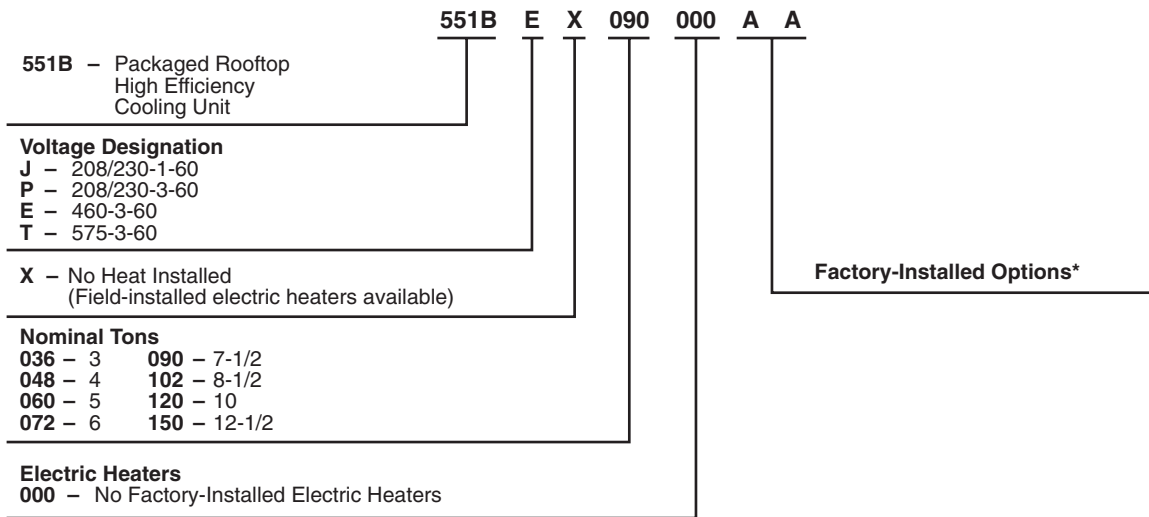
**TABLE OF CONTENTS**

|                                     | Page  |
|-------------------------------------|-------|
| Features/Benefits . . . . .         | 1-3   |
| Model Number Nomenclature . . . . . | 4     |
| ARI Capacities . . . . .            | 4     |
| Physical Data . . . . .             | 5,6   |
| Options and Accessories . . . . .   | 7-10  |
| Base Unit Dimensions . . . . .      | 11,12 |
| Accessory Dimensions . . . . .      | 13,14 |
| Selection Procedure . . . . .       | 15    |
| Performance Data . . . . .          | 16-46 |
| Electrical Data . . . . .           | 46-54 |
| Typical Piping and Wiring . . . . . | 55    |
| Controls . . . . .                  | 56-58 |
| Typical Wiring Schematic . . . . .  | 59-61 |
| Application Data . . . . .          | 61-65 |
| Guide Specifications . . . . .      | 66-68 |

## FEATURES/BENEFITS (cont)



## MODEL NUMBER NOMENCLATURE



\*Refer to unit price pages for ordering codes and factory-installed options.

## ARI\* CAPACITIES

| UNIT<br>551B | NOMINAL<br>TONS | STANDARD<br>CFM | NET COOLING CAP<br>(Btuh) | TOTAL<br>kW | SEER† | EER   | SOUND<br>RATING<br>(dB) |
|--------------|-----------------|-----------------|---------------------------|-------------|-------|-------|-------------------------|
| 036          | 3               | 1200            | 36,000                    | 3.21        | 13.00 | 11.20 | 76                      |
| 048          | 4               | 1450            | 47,000                    | 4.25        | 13.00 | 11.05 | 76                      |
| 060          | 5               | 1750            | 61,000                    | 5.55        | 13.00 | 11.00 | 80                      |

| UNIT<br>551B | NOMINAL<br>TONS | STANDARD<br>CFM | NET COOLING CAP<br>(Btuh) | TOTAL<br>kW | EER   | SOUND<br>RATING<br>(dB) | IPLV |
|--------------|-----------------|-----------------|---------------------------|-------------|-------|-------------------------|------|
| 072          | 6               | 2100            | 74,000                    | 6.70        | 11.00 | 80                      | **   |
| 090          | 7 1/2           | 3000            | 90,000                    | 8.18        | 11.00 | 82                      | 11.6 |
| 102          | 8 1/2           | 3000            | 102,000                   | 9.44        | 10.80 | 82                      | 10.9 |
| 120          | 10              | 3200            | 120,000                   | 10.91       | 11.00 | 84                      | 11.4 |
| 150          | 12 1/2          | 4300            | 139,000                   | 14.04       | 9.80  | 86                      | 9.9  |

### LEGEND

**dB** — Decibels  
**EER** — Energy Efficiency Ratio  
**IPLV** — Integrated Part-Load Value  
**SEER** — Seasonal Energy Efficiency Ratio

\*Air-Conditioning & Refrigeration Institute.

†Applies only to units with capacity of 65,000 Btuh or less.

\*\*IPLV is not applicable to single-compressor units.

### NOTES:

- Rated in accordance with ARI Standard 210/240 (036-120 units) or 360 (150 units) and 270 (036-150 units).
- Ratings are net values, reflecting the effects of circulating fan heat. Ratings are based on:

**Cooling Standard:** 80 F db, 67 wb indoor entering-air temperature and 95 F db outdoor entering-air temperature.

**IPLV Standard:** 80 F db, 67 F wb indoor entering-air temperature and 80 F db outdoor entering-air temperature.



551B036-120  
Units Only



551B150  
Unit Only

# PHYSICAL DATA

| UNIT 551B                                                 | 036         | 048         | 060                                                                                                  | 072         |
|-----------------------------------------------------------|-------------|-------------|------------------------------------------------------------------------------------------------------|-------------|
| NOMINAL CAPACITY (tons)                                   | 3           | 4           | 5                                                                                                    | 6           |
| OPERATING WEIGHT (lb)                                     |             |             |                                                                                                      |             |
| Unit                                                      | 435         | 445         | 465                                                                                                  | 520         |
| Durablade Economizer                                      | 34          | 34          | 34                                                                                                   | 34          |
| EconoMiSer                                                | 47          | 47          | 47                                                                                                   | 47          |
| Perfect Humidity™ Dehumidification Package                | 18          | 18          | 18                                                                                                   | 18          |
| Roof Curb                                                 | 115         | 115         | 115                                                                                                  | 115         |
| COMPRESSOR                                                |             |             | Scroll                                                                                               |             |
| Quantity                                                  | 1           | 1           | 1                                                                                                    | 1           |
| Oil (oz)                                                  | 42          | 53          | 50                                                                                                   | 60          |
| REFRIGERANT TYPE                                          |             |             | R-22                                                                                                 |             |
| Operating Charge (lb-oz)                                  |             |             |                                                                                                      |             |
| Standard Unit                                             | 5- 8        | 8-6         | 10- 0                                                                                                | 9-10        |
| Unit With Perfect Humidity Dehumidification Package       | 8-13        | 11-2        | 12-13                                                                                                | 13- 6       |
| CONDENSER FAN                                             |             |             | Propeller Type                                                                                       |             |
| Quantity...Diameter (in.)                                 | 1...22      | 1...22      | 1...22                                                                                               | 1...22      |
| Nominal Cfm                                               | 3500        | 3500        | 4100                                                                                                 | 4100        |
| Motor Hp...Rpm                                            | 1/8...825   | 1/8...825   | 1/4...1100                                                                                           | 1/4...1100  |
| Watts Input (Total)                                       | 180         | 180         | 320                                                                                                  | 320         |
| CONDENSER COIL                                            |             |             | High-Efficiency Enhanced Copper Tubes, Lanced Aluminum Fins                                          |             |
| Standard Unit                                             |             |             |                                                                                                      |             |
| Rows...Fins/in.                                           | 1...17      | 2...17      | 2...17                                                                                               | 2...17      |
| Total Face Area (sq ft)                                   | 14.6        | 16.5        | 16.5                                                                                                 | 16.5        |
| Unit With Perfect Humidity Dehumidification Package       |             |             |                                                                                                      |             |
| Rows...Fins/in.                                           | 1...17      | 1...17      | 1...17                                                                                               | 1...17      |
| Total Face Area (sq ft)                                   | 3.9         | 3.9         | 3.9                                                                                                  | 3.9         |
| EVAPORATOR FAN                                            |             |             | Centrifugal Type, Belt Drive                                                                         |             |
| Quantity...Size (in.)                                     | 1...10 x 10 | 1...10 x 10 | 1...10 x 10                                                                                          | 1...10 x 10 |
| Nominal Cfm                                               | 1200        | 1600        | 2000                                                                                                 | 2400        |
| Maximum Continuous Bhp                                    |             |             |                                                                                                      |             |
| Standard                                                  | 1.20        | 1.20        | 1.80/2.40*                                                                                           | 2.40        |
| High Static                                               | 2.40        | 2.40        | 2.90                                                                                                 | 2.90        |
| Motor Frame                                               |             |             |                                                                                                      |             |
| Standard                                                  | 48          | 48          | 56                                                                                                   | 56          |
| High Static                                               | 56          | 56          | 56                                                                                                   | 56          |
| Fan Rpm Range                                             |             |             |                                                                                                      |             |
| Standard                                                  | 760-1090    | 840-1185    | 1020-1460/1120-1585*                                                                                 | 1120-1585   |
| High Static                                               | 1075-1455   | 1075-1455   | 1300-1685                                                                                            | 1300-1685   |
| Motor Bearing Type                                        | Ball        | Ball        | Ball                                                                                                 | Ball        |
| Maximum Fan Rpm                                           | 2100        | 2100        | 2100                                                                                                 | 2100        |
| Motor Pulley Pitch Diameter A/B (in.)                     |             |             |                                                                                                      |             |
| Standard                                                  | 1.9/2.9     | 1.9/2.9     | 2.4/3.4                                                                                              | 2.4/3.4     |
| High Static                                               | 2.8/3.8     | 2.8/3.8     | 3.4/4.4                                                                                              | 3.4/4.4     |
| Nominal Motor Shaft Diameter (in.)                        |             |             |                                                                                                      |             |
| Standard                                                  | 1/2         | 1/2         | 5/8                                                                                                  | 5/8         |
| High Static                                               | 5/8         | 5/8         | 5/8                                                                                                  | 5/8         |
| Fan Pulley Pitch Diameter (in.)                           |             |             |                                                                                                      |             |
| Standard                                                  | 4.5         | 4.0         | 4.0                                                                                                  | 4.0         |
| High Static                                               | 4.5         | 4.0         | 4.5                                                                                                  | 4.5         |
| Belt — Quantity...Type...Length (in.)                     |             |             |                                                                                                      |             |
| Standard                                                  | 1...A...33  | 1...A...36  | 1...A...40                                                                                           | 1...A...38  |
| High Static                                               | 1...A...39  | 1...A...39  | 1...A...40                                                                                           | 1...A...40  |
| Pulley Center Line Distance (in.)                         | 10.0-12.4   | 10.0-12.4   | 14.7-15.5                                                                                            | 14.7-15.5   |
| Speed Change per Full Turn of Movable Pulley Flange (rpm) |             |             |                                                                                                      |             |
| Standard                                                  | 65          | 70          | 75                                                                                                   | 95          |
| High Static                                               | 65          | 65          | 60                                                                                                   | 60          |
| Movable Pulley Maximum Full Turns From Closed Position    |             |             |                                                                                                      |             |
| Standard                                                  | 5           | 5           | 6                                                                                                    | 5           |
| High Static                                               | 6           | 6           | 5                                                                                                    | 5           |
| Factory Setting — Full Turns Open                         |             |             |                                                                                                      |             |
| Standard                                                  | 3           | 3           | 3                                                                                                    | 3           |
| High Static                                               | 3 1/2       | 3 1/2       | 3 1/2                                                                                                | 3 1/2       |
| Factory Speed Setting (rpm)                               |             |             |                                                                                                      |             |
| Standard                                                  | 890         | 980         | 1240                                                                                                 | 1304        |
| High Static                                               | 1233        | 1233        | 1396                                                                                                 | 1396        |
| Fan Shaft Diameter at Pulley (in.)                        | 5/8         | 5/8         | 5/8                                                                                                  | 5/8         |
| EVAPORATOR COIL                                           |             |             | High Efficiency Enhanced Copper Tubes, Aluminum Double-Wavy Fins, Fixed Orifice Metering Feed Device |             |
| Rows...Fins/in.                                           | 2...15      | 2...15      | 4...15                                                                                               | 4...15      |
| Total Face Area (sq ft)                                   | 5.5         | 5.5         | 5.5                                                                                                  | 5.5         |
| HIGH-PRESSURE SWITCH (psig)                               |             |             |                                                                                                      |             |
| Standard Compressor Internal Relief (Differential)        |             |             | 450 ± 50                                                                                             |             |
| Cutout                                                    |             |             | 428                                                                                                  |             |
| Reset (Auto.)                                             |             |             | 320                                                                                                  |             |
| LOSS-OF-CHARGE/LOW-PRESSURE SWITCH (Liquid Line) (psig)   |             |             |                                                                                                      |             |
| Cutout                                                    |             |             | 7 ± 3                                                                                                |             |
| Reset (Auto.)                                             |             |             | 22 ± 5                                                                                               |             |
| FREEZE-PROTECTION THERMOSTAT                              |             |             |                                                                                                      |             |
| Opens (F)                                                 |             |             | 30                                                                                                   |             |
| Closes (F)                                                |             |             | 45                                                                                                   |             |
| OUTDOOR-AIR INLET SCREENS                                 |             |             | Cleanable                                                                                            |             |
| Quantity...Size (in.)                                     |             |             | 1...20 x 24 x 1                                                                                      |             |
| RETURN-AIR FILTERS                                        |             |             | Throwaway                                                                                            |             |
| Quantity...Size (in.)                                     |             |             | 2...16 x 25 x 2                                                                                      |             |

## LEGEND

Bhp — Brake Horsepower  
 \*Single-phase/three-phase.

# PHYSICAL DATA (cont)

| UNIT 551B                                                 | 090                                                                                                  | 102             | 120             | 150             |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|
| NOMINAL CAPACITY (tons)                                   | 7½                                                                                                   | 8½              | 10              | 12½             |
| OPERATING WEIGHT (lb)                                     |                                                                                                      |                 |                 |                 |
| Unit                                                      | 755                                                                                                  | 760             | 915             | 930             |
| Durablade Economizer                                      | 44                                                                                                   | 44              | 44              | 44              |
| EconoMi\$er                                               | 62                                                                                                   | 62              | 62              | 62              |
| Perfect Humidity™ Dehumidification Package                | 29                                                                                                   | 29              | 33              | 33              |
| Roof Curb                                                 | 143                                                                                                  | 143             | 143             | 143             |
| COMPRESSOR                                                | Scroll                                                                                               |                 |                 |                 |
| Quantity                                                  | 2                                                                                                    | 2               | 2               | 2               |
| Oil (oz) (each compressor)                                | 53                                                                                                   | 53              | 50              | 60              |
| REFRIGERANT TYPE                                          | R-22                                                                                                 |                 |                 |                 |
| Operating Charge (lb-oz)                                  |                                                                                                      |                 |                 |                 |
| Standard Unit                                             |                                                                                                      |                 |                 |                 |
| Circuit 1                                                 | 7-10                                                                                                 | 7-14            | 9-3             | 9-8             |
| Circuit 2                                                 | 8- 2                                                                                                 | 8- 5            | 10-3            | 9-5             |
| Unit With Perfect Humidity Dehumidification Package       |                                                                                                      |                 |                 |                 |
| Circuit 1                                                 | 10-10                                                                                                | 10-11           | 12- 8           | 12-6            |
| Circuit 2                                                 | 12- 8                                                                                                | 10-10           | 12-14           | 12-2            |
| CONDENSER FAN                                             | Propeller Type                                                                                       |                 |                 |                 |
| Quantity...Diameter (in.)                                 | 2...22                                                                                               | 2...22          | 2...22          | 2...22          |
| Nominal Cfm                                               | 6500                                                                                                 | 6500            | 7000            | 7000            |
| Motor Hp...Rpm                                            | 1¼...1100                                                                                            | 1¼...1100       | 1¼...1100       | 1¼...1100       |
| Watts Input (Total)                                       | 650                                                                                                  | 650             | 650             | 650             |
| CONDENSER COIL                                            | High-Efficiency Enhanced Copper Tubes, Lanced Aluminum Fins                                          |                 |                 |                 |
| Standard Unit                                             |                                                                                                      |                 |                 |                 |
| Rows...Fins/in.                                           | 2...17                                                                                               | 2...17          | 2...17          | 2...17          |
| Total Face Area (sq ft)                                   | 20.5                                                                                                 | 20.5            | 25.0            | 25.0            |
| Unit with Perfect Humidity Dehumidification Package       |                                                                                                      |                 |                 |                 |
| Rows...Fins/in.                                           | 1...17                                                                                               | 1...17          | 1...17          | 1...17          |
| Total Face Area (sq ft)                                   | 6.3                                                                                                  | 6.3             | 8.4             | 8.4             |
| EVAPORATOR FAN                                            | Centrifugal Type, Belt Drive                                                                         |                 |                 |                 |
| Size (in.)                                                | 15 x 15                                                                                              | 15 x 15         | 15 x 15         | 15 x 15         |
| Nominal Cfm — Standard                                    | 3000                                                                                                 | 3400            | 4000            | 5000            |
| Maximum Continuous Bhp                                    |                                                                                                      |                 |                 |                 |
| Standard                                                  | 2.90                                                                                                 | 2.90            | 3.70            | 5.25            |
| High Static                                               | 4.20                                                                                                 | 4.20            | 5.25            | —               |
| Motor Frame                                               | 56                                                                                                   | 56              | 56              | 56              |
| Fan Rpm Range                                             |                                                                                                      |                 |                 |                 |
| Standard                                                  | 840-1085                                                                                             | 840-1085        | 860-1080        | 900-1260        |
| High Static                                               | 860-1080                                                                                             | 860-1080        | 830-1130        | —               |
| Motor Bearing Type                                        | Ball                                                                                                 | Ball            | Ball            | Ball            |
| Maximum Fan Rpm                                           | 2100                                                                                                 | 2100            | 2100            | 2100            |
| Motor Pulley Pitch Diameter A/B (in.)                     |                                                                                                      |                 |                 |                 |
| Standard                                                  | 3.4/4.4                                                                                              | 3.4/4.4         | 4.0/5.0         | 2.8/3.8         |
| High Static                                               | 4.0/5.0                                                                                              | 4.0/5.0         | 2.8/3.8         | —               |
| Nominal Motor Shaft Diameter (in.)                        | 7/8                                                                                                  | 7/8             | 7/8             | 7/8             |
| Fan Pulley Pitch Diameter (in.)                           |                                                                                                      |                 |                 |                 |
| Standard                                                  | 7.0                                                                                                  | 7.0             | 8.0             | 5.8             |
| High Static                                               | 8.0                                                                                                  | 8.0             | 5.8             | —               |
| Belt — Quantity...Type...Length (in.)                     |                                                                                                      |                 |                 |                 |
| Standard                                                  | 1...A...51                                                                                           | 1...A...51      | 1...A...51      | 1...BX...46     |
| High Static                                               | 1...A...55                                                                                           | 1...A...55      | 1...BX...46     | —               |
| Pulley Center Line Distance (in.)                         | 16.75-19.25                                                                                          | 16.75-19.25     | 15.85-17.50     | 15.85-17.50     |
| Speed Change per Full Turn of Movable Pulley Flange (rpm) |                                                                                                      |                 |                 |                 |
| Standard                                                  | 50                                                                                                   | 50              | 45              | 60              |
| High Static                                               | 60                                                                                                   | 60              | 60              | —               |
| Movable Pulley Maximum Full Turns From Closed Position    |                                                                                                      |                 |                 |                 |
| Standard                                                  | 5                                                                                                    | 5               | 5               | 6               |
| High Static                                               | 5                                                                                                    | 5               | 6               | —               |
| Factory Setting — Full Turns Open                         | 5                                                                                                    | 5               | 5               | 5               |
| Factory Speed Setting (rpm)                               |                                                                                                      |                 |                 |                 |
| Standard                                                  | 840                                                                                                  | 840             | 860             | 960             |
| High Static                                               | 860                                                                                                  | 860             | 890             | —               |
| Fan Shaft Diameter at Pulley (in.)                        | 1                                                                                                    | 1               | 1               | 1               |
| EVAPORATOR COIL                                           | High Efficiency Enhanced Copper Tubes, Aluminum Double-Wavy Fins, Fixed Orifice Metering Feed Device |                 |                 |                 |
| Rows...Fins/in.                                           | 3...15                                                                                               | 3...15          | 4...15          | 4...15          |
| Total Face Area (sq ft)                                   | 8.9                                                                                                  | 8.9             | 11.1            | 11.1            |
| HIGH-PRESSURE SWITCH (psig)                               |                                                                                                      |                 |                 |                 |
| Standard Compressor Internal Relief (Differential)        |                                                                                                      |                 | 450 ± 50        |                 |
| Cutout                                                    |                                                                                                      |                 | 428             |                 |
| Reset (Auto.)                                             |                                                                                                      |                 | 320             |                 |
| LOSS-OF-CHARGE/LOW-PRESSURE SWITCH (Liquid Line) (psig)   |                                                                                                      |                 |                 |                 |
| Cutout                                                    |                                                                                                      |                 | 7 ± 3           |                 |
| Reset (Auto.)                                             |                                                                                                      |                 | 22 ± 5          |                 |
| FREEZE-PROTECTION THERMOSTAT                              |                                                                                                      |                 |                 |                 |
| Opens (F)                                                 |                                                                                                      |                 | 30 ± 5          |                 |
| Closes (F)                                                |                                                                                                      |                 | 45 ± 5          |                 |
| OUTDOOR-AIR INLET SCREENS                                 | Cleanable                                                                                            |                 |                 |                 |
| Quantity...Size (in.)                                     |                                                                                                      |                 | 1...20 x 25 x 1 |                 |
|                                                           |                                                                                                      |                 | 1...16 x 25 x 1 |                 |
| RETURN-AIR FILTERS                                        | Throwaway                                                                                            |                 |                 |                 |
| Quantity...Size (in.)                                     | 4...16 x 20 x 2                                                                                      | 4...16 x 20 x 2 | 4...20 x 20 x 2 | 4...20 x 20 x 2 |

## LEGEND

Bhp — Brake Horsepower

## OPTIONS AND ACCESSORIES

| ITEM                                                                               | OPTION* | ACCESSORY† |
|------------------------------------------------------------------------------------|---------|------------|
| Electric Heater and Single Point Kit                                               |         | X          |
| Integrated Economizer (Durablade)                                                  | X       | X          |
| Integrated Economizer (EconoMi\$er)                                                | X       | X          |
| 25% Manual Outdoor Air Damper                                                      | X       | X          |
| 50% Manual Outdoor-Air Damper                                                      |         | X          |
| Two-Position Damper (25% Open)                                                     |         | X          |
| Two-Position Damper (100% Open)                                                    |         | X          |
| High-Static Evaporator-Fan Motor and Drive (Sizes 036-120, Three-Phase Units Only) | X       |            |
| Perfect Humidity™ Dehumidification Package                                         | X       |            |
| Convenience Outlet                                                                 | X       |            |
| Unit-Mounted Disconnect (Non-Fused)**                                              | X       |            |
| Hinged Panel Options††                                                             | X       |            |
| Roof Curb (14 in.)                                                                 |         | X          |
| Roof Curb (24 in.)                                                                 |         | X          |
| Thru-the-Bottom Service Connections                                                |         | X          |
| Electronic Programmable Thermostat                                                 |         | X          |
| Light Commercial Thermostat                                                        |         | X          |
| Light Commercial Thermidstat                                                       |         | X          |
| Humidistat                                                                         |         | X          |
| Fan/Filter Status                                                                  |         | X          |
| Thermostat and Subbase                                                             |         | X          |
| Time Guard® II Control Circuit (3-phase units only)                                |         | X          |
| Motormaster® I Low Ambient Control                                                 |         | X          |
| Motormaster IV Low Ambient Control                                                 |         | X          |
| Accusensor™ II Enthalpy Control                                                    |         | X          |
| Accusensor III Differential Enthalpy Sensor                                        |         | X          |
| Condenser Coil Hail Guard                                                          |         | X          |
| Coil Guard Grille                                                                  |         | X          |
| EconoMi\$er and Power Exhaust                                                      |         | X          |
| Power Exhaust for EconoMi\$er                                                      |         | X          |
| Outdoor-Air Enthalpy Sensor (EconoMi\$er)                                          |         | X          |
| Return-Air Enthalpy Sensor (EconoMi\$er)                                           |         | X          |
| Return-Air Temperature Sensor (EconoMi\$er)                                        |         | X          |
| Indoor-Air Quality CO <sub>2</sub> Sensor (EconoMi\$er)                            |         | X          |

\*Factory installed.

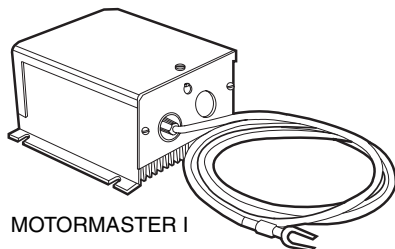
†Field installed.

\*\*Cannot be used when unit electrical rating exceeds 80 amps.

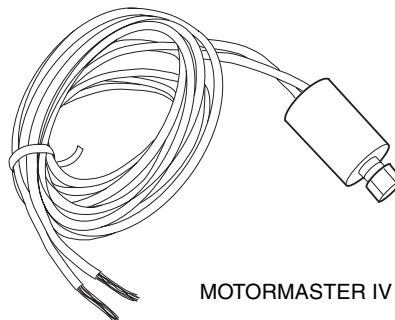
††EconoMi\$er must be factory installed when used with hinged panels.

### LOW AMBIENT CONTROLS

The 551B036-150 standard units are designed to operate at outdoor temperatures down to 25 F. With accessory Motormaster control (condenser-fan speed modulation) or Motormaster IV control (condenser-fan cycling), units can operate at outdoor temperatures down to -20 F. The head pressure controls, which mount in the condenser section, modulate the condenser-fan motor to maintain correct condensing temperature.



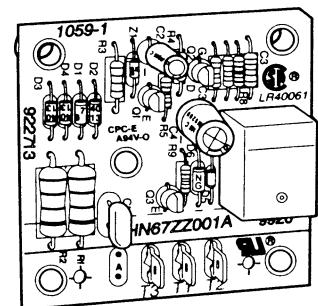
MOTORMASTER I



MOTORMASTER IV

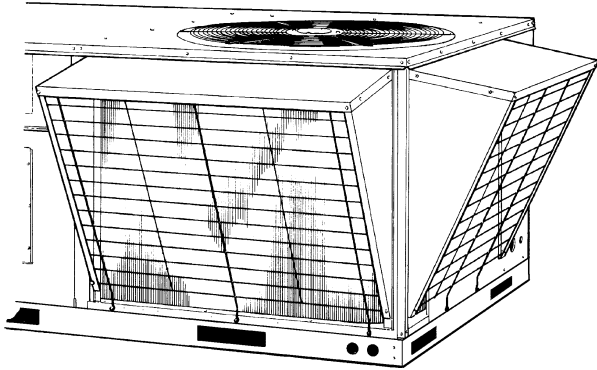
### TIME GUARD II CONTROL

Time Guard II Control automatically prevents compressor from restarting for at least 5 minutes after a shutdown. Field-installed accessory prevents short cycling of compressor if thermostat is rapidly changed. Time Guard II device mounts in the control compartment of unit.



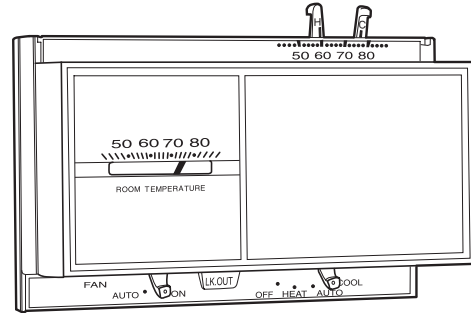
## OPTIONS AND ACCESSORIES (cont)

### HAIL GUARD



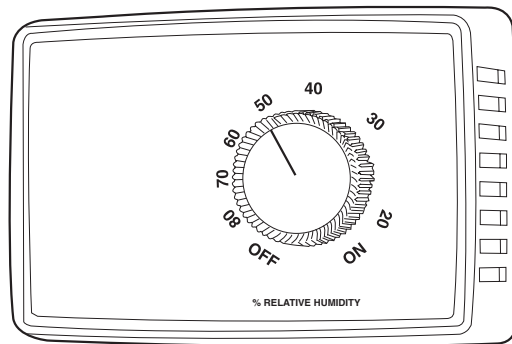
Condenser coil hail guard accessory protects coil against damage from hail and other flying debris (field installed).

### THERMOSTAT



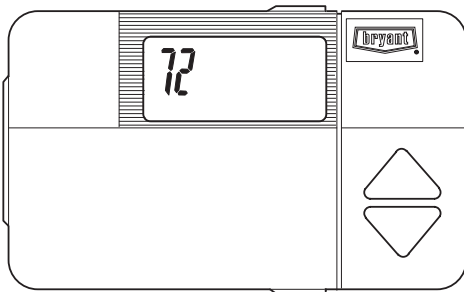
Thermostat (24 v) provides one- or 2-stage cooling for control of unit. Matching subbases are available with or without tamperproof switches and automatic changeover.

### HUMIDISTAT



Field-installed, wall-mounted humidistat is used to control operation of the Perfect Humidity dehumidification package. The humidistat controls the occupied space humidity at a user-selected setting between 20% and 80% relative humidity.

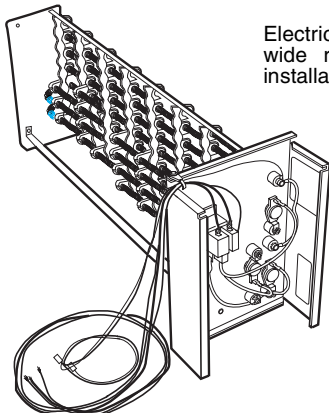
### BRYANT COMMERCIAL PROGRAMMABLE THERMOSTAT



Designed specifically for use with Bryant commercial systems, this Bryant programmable thermostat features LED occupied/unoccupied displays and setback mode which can override continuous fan operation.

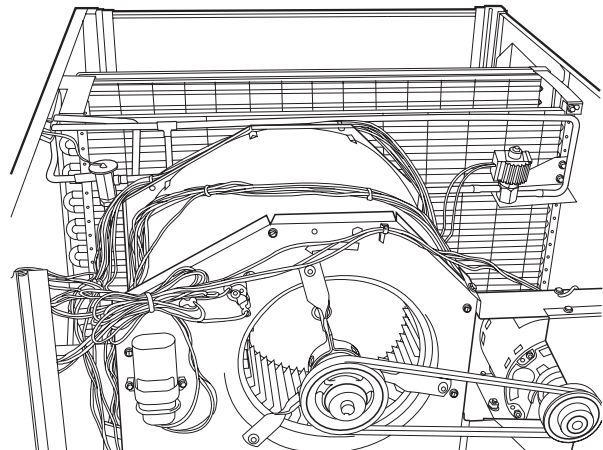
### BRYANT LIGHT COMMERCIAL THERMIDSTAT

The light commercial thermidstat combines temperature control and humidity display in one device and provides continuous fan operation in occupied mode. The light commercial thermidstat controls the Perfect Humidity dehumidification package at selected levels between 50% and 90% humidity.



Electric heaters are available in a wide range of capacities for field installation.

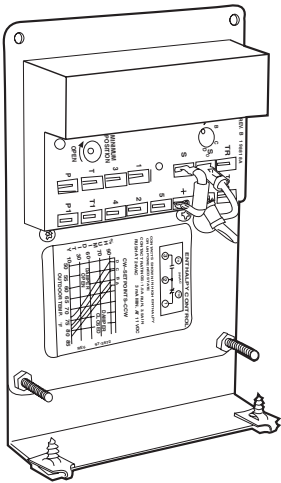
### PERFECT HUMIDITY™ DEHUMIDIFICATION PACKAGE



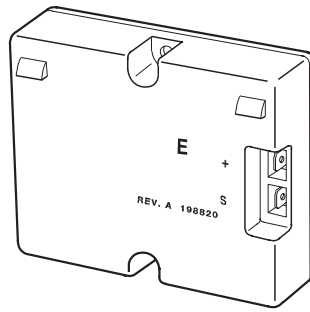
The Perfect Humidity dehumidification package is a factory-installed option that provides increased dehumidification by cooling the hot liquid refrigerant leaving the condenser coil. The Perfect Humidity package consists of a subcooling coil located on the leaving-air side of the evaporator coil. The location of this coil in the indoor-air stream enhances the latent capacity of the units by as much as 40%. The Perfect Humidity package includes crankcase heater(s) and low-pressure switch(es) and operation can be controlled by a field-installed, wall-mounted humidistat.

## OPTIONS AND ACCESSORIES (cont)

### ACCUSENSOR™ II (Enthalpy Control)



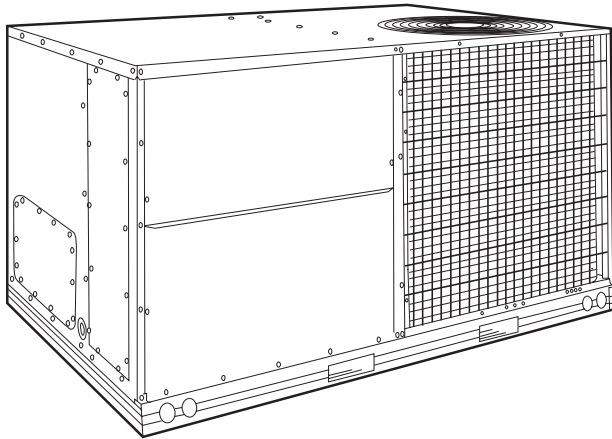
### ACCUSENSOR III (Differential Enthalpy)



Accusensor economizer controls help provide efficient, economical economizer operation. The Accusensor I dry-bulb sensor measures outdoor temperature and is standard with the Durablade economizer.

The accessory Accusensor II solid-state enthalpy control senses both dry and wet bulb of the outdoor air to provide an accurate enthalpy reading. Accusensor II is available as a field-installed accessory for the Durablade economizer.

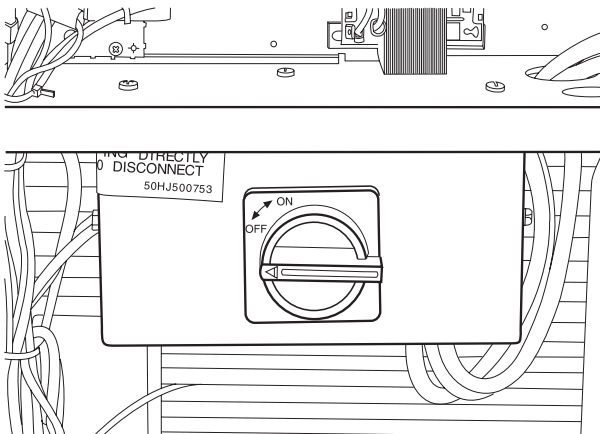
The accessory Accusensor III differential enthalpy sensor compares outdoor temperature and humidity to return-air temperature and humidity and determines the most economical mixture of air. Accusensor III is available for Durablade economizers.



### COIL GUARD GRILLE

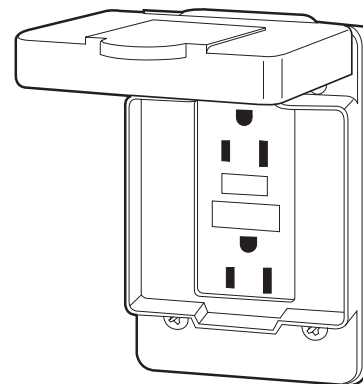
Coil guard grille protects coils against large objects and vandalism.

### UNIT-MOUNTED DISCONNECT



Factory-installed, internally mounted, NEC and UL approved non-fused switch provides unit power shutoff and disconnect lockout protection capability. The switch is accessible from outside the unit. Not for use on units rated higher than 80 amps.

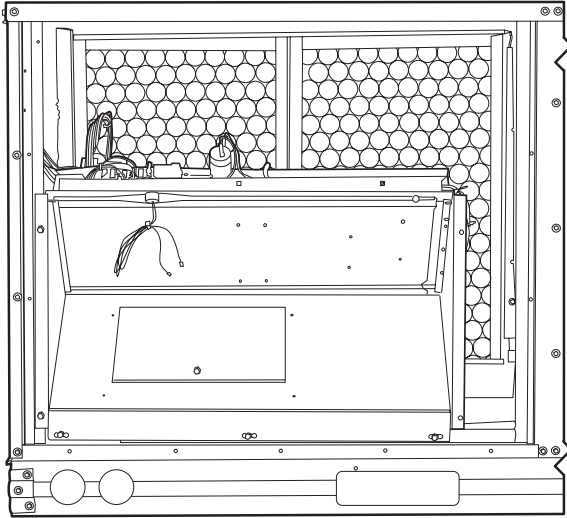
### CONVENIENCE OUTLET



Factory-installed, internally mounted and externally accessible 115-v female receptacle. Includes 15-amp GFI receptacle with independent fuse protection. Voltage required to operate convenience outlet is provided by a factory-installed step down transformer.

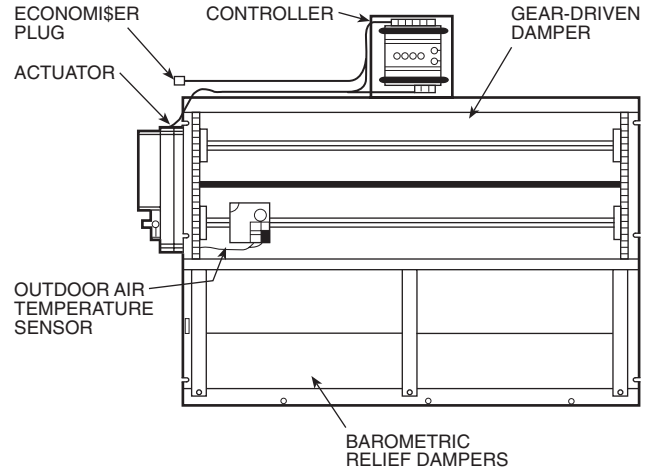
## OPTIONS AND ACCESSORIES (cont)

### DURABLADE ECONOMIZER



Exclusive Durablade economizer damper design saves energy while providing economical and reliable cooling. A sliding plate on the face of the economizer controls the amount of outdoor air entering the system. When the sliding plate is closed, it provides a leakproof seal which prevents ambient air from seeping in or conditioned air from seeping out. It can be easily adjusted for 100% outdoor air or any proportions of mixed air. Design includes standard dry-bulb control and 30% barometric relief capability.

### ECONOMIZER

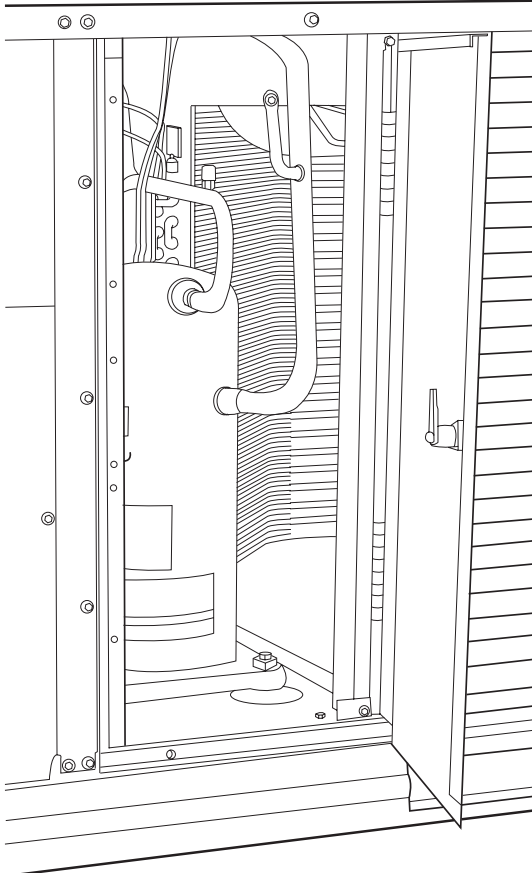


Factory-installed EconoMi\$er utilizes a microprocessor-based control, gear drive damper system, low pressure drop characteristics, built-in spring return (for close upon power loss), and an integral barometric damper.

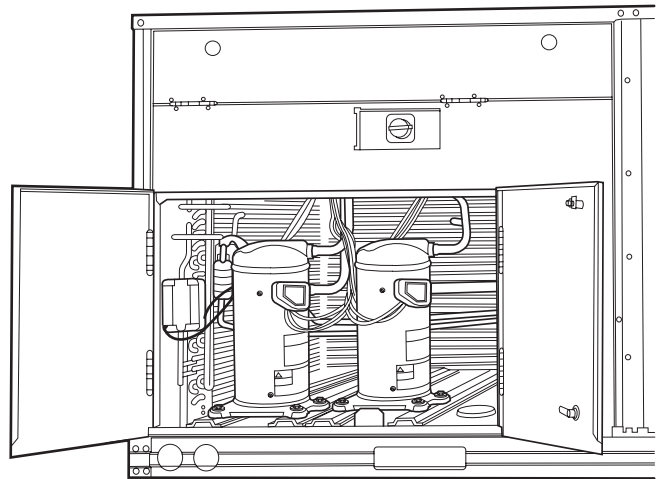
**NOTE:** EconoMi\$er is available for vertical ductwork applications factory installed.

A vertical EconoMi\$er, 2-stage power exhaust and dedicated horizontal EconoMi\$er are available for field installation.

### COMPRESSOR HINGED PANEL OPTION 551B036-072 UNITS SHOWN



### COMPRESSOR HINGED PANEL OPTION 551B090-150 UNITS SHOWN



This is included as a factory-installed option. It permits quick and simple compressor access.

## BASE UNIT DIMENSIONS

| UNIT<br>551B | STD UNIT<br>WEIGHT |     | DURABLADE<br>ECONOMIZER<br>WEIGHT |      | ECONOMISER<br>WEIGHT |      | CORNER<br>WEIGHT<br>(A) |      | CORNER<br>WEIGHT<br>(B) |      | CORNER<br>WEIGHT<br>(C) |      | CORNER<br>WEIGHT<br>(D) |      |
|--------------|--------------------|-----|-----------------------------------|------|----------------------|------|-------------------------|------|-------------------------|------|-------------------------|------|-------------------------|------|
|              | Lb                 | Kg  | Lb                                | Kg   | Lb                   | Kg   | Lb                      | Kg   | Lb                      | Kg   | Lb                      | Kg   | Lb                      | Kg   |
| 036          | 435                | 197 | 34                                | 15.4 | 47                   | 21.3 | 124                     | 56.2 | 106                     | 48.1 | 95                      | 43.1 | 110                     | 49.9 |
| 048          | 445                | 202 | 34                                | 15.4 | 47                   | 21.3 | 127                     | 57.6 | 108                     | 49.0 | 97                      | 44.0 | 113                     | 51.3 |
| 060          | 465                | 211 | 34                                | 15.4 | 47                   | 21.3 | 133                     | 60.3 | 113                     | 51.3 | 101                     | 45.8 | 118                     | 53.5 |
| 072          | 520                | 236 | 34                                | 15.4 | 47                   | 21.3 | 149                     | 67.6 | 127                     | 57.6 | 112                     | 50.8 | 132                     | 59.9 |

|   |                                          |
|---|------------------------------------------|
| A | 13/8" Dia. [35] Field Power Supply Hole  |
| B | 2" Dia. [51] Power Supply Knockout       |
| C | 13/4" Dia. [44] Charging Port Hole       |
| D | 7/8" Dia. [22] Field Control Wiring Hole |
| E | 3/4" — 14 NPT Condensate Drain           |
| F | 21/2" Dia. [64] Power Supply Knockout    |

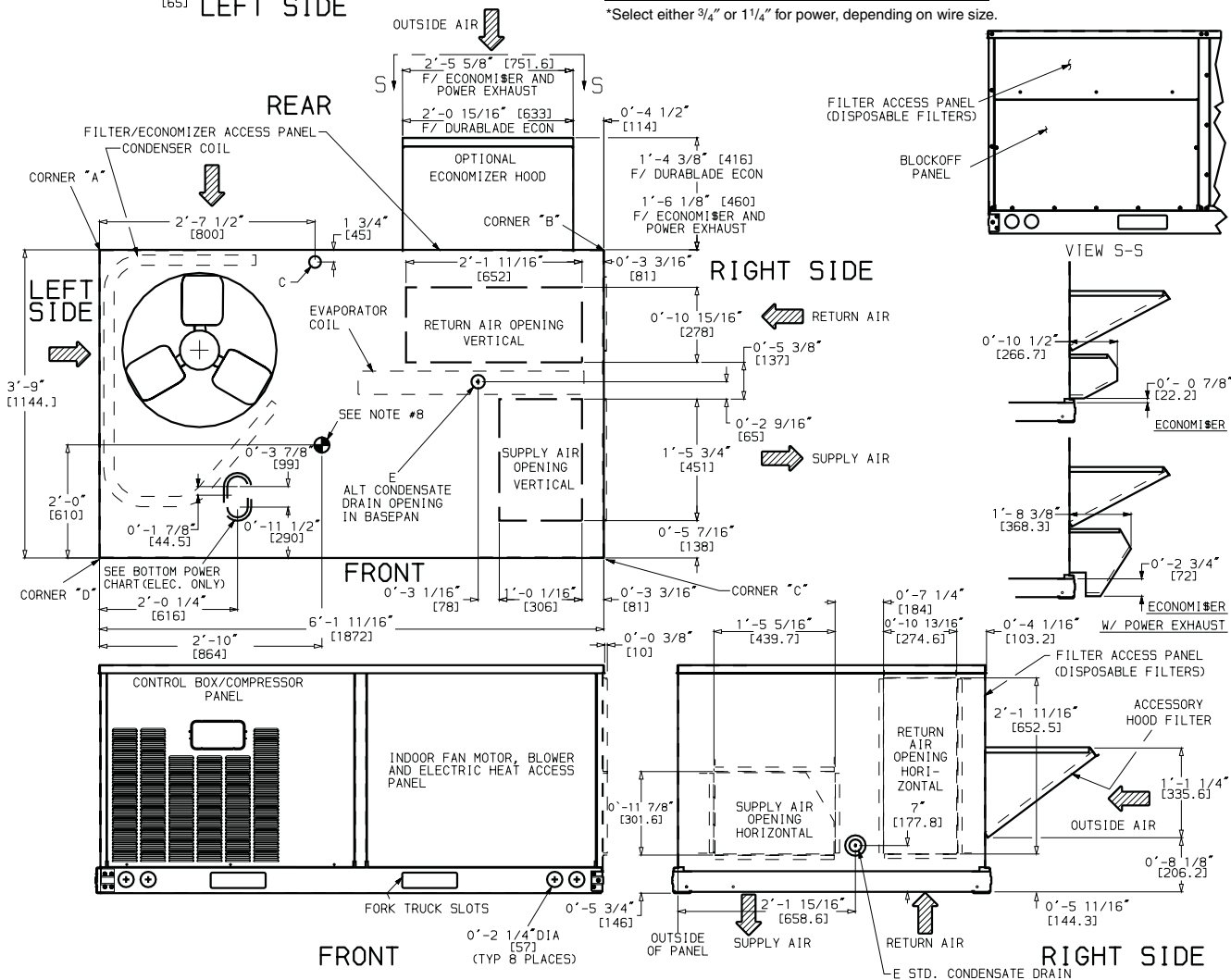
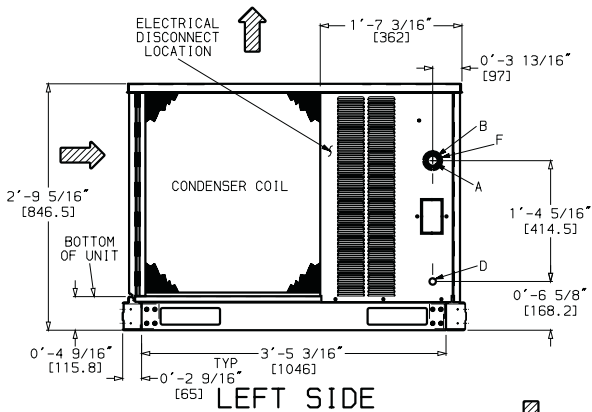
**NOTES:**

1. Dimensions in [ ] are in millimeters.
2.  Center of gravity.
3.  Direction of airflow.
4. Ductwork to be attached to accessory roof curb only.
5. Minimum clearance (local codes or jurisdiction may prevail):
  - a. Bottom to combustible surfaces (when not using curb) 0 inches, on horizontal discharge units with electric heat 1 in. clearance to ductwork for 1 ft.
  - b. Condenser coil, for proper airflow, 36 in. one side, 12 in. the other. The side getting the greater clearance is optional.
  - c. Overhead, 60 in. to assure proper condenser fan operation.
  - d. Between units, control box side, 42 in. per NEC (National Electrical Code).
  - e. Between unit and ungrounded surfaces, control box side, 36 in. per NEC.
  - f. Between unit and block or concrete walls and other grounded surfaces, control box side, 42 in. per NEC.
  - g. Horizontal supply and return end, 0 inches.
6. With the exception of the clearance for the condenser coil as stated in Note 5b, a removable fence or barricade requires no clearance.
7. Units may be installed on combustible floors made from wood or Class A, B, or C roof covering material.
8. The vertical center of gravity is 1'-6 1/2" [470] up from the bottom of the base rail.

**BOTTOM POWER CHART, THESE HOLES REQ'D FOR USE  
WITH ACCESSORY PACKAGES — CRBTMPWR001A00 (1/2", 3/4")  
OR CRBTMPWR002A00 (1/2", 1 1/4")**

| THREADED CONDUIT SIZE | WIRE USE | REQ'D HOLE SIZES (Max.) |
|-----------------------|----------|-------------------------|
| 1/2"                  | 24 V     | 7/8" [22.2]             |
| 3/4"                  | Power*   | 1 1/8" [28.4]           |
| 1 1/4"                | Power*   | 1 3/4" [44.4]           |

\*Select either 3/4" or 1 1/4" for power, depending on wire size.



**551B036-072**

# BASE UNIT DIMENSIONS (cont)

| UNIT<br>551B | STD UNIT<br>WEIGHT |     | DURABLADE<br>ECONOMIZER<br>WEIGHT |    | ECONOMISER<br>WEIGHT |    | CORNER<br>WEIGHT<br>(A) |    | CORNER<br>WEIGHT<br>(B) |    | CORNER<br>WEIGHT<br>(C) |     | CORNER<br>WEIGHT<br>(D) |     | "H"       |     | "J"       |      | "K"        |     |
|--------------|--------------------|-----|-----------------------------------|----|----------------------|----|-------------------------|----|-------------------------|----|-------------------------|-----|-------------------------|-----|-----------|-----|-----------|------|------------|-----|
|              | Lb                 | Kg  | Lb                                | Kg | Lb                   | Kg | Lb                      | Kg | Lb                      | Kg | Lb                      | Kg  | Lb                      | Kg  | Ft-in.    | mm  | Ft-in.    | mm   | Ft-in.     | mm  |
| 090          | 755                | 342 | 44                                | 20 | 62                   | 28 | 164                     | 74 | 140                     | 64 | 208                     | 94  | 243                     | 110 | 2'-0 7/8  | 632 | 3'-5 9/16 | 1050 | 2'-9 11/16 | 856 |
| 102          | 760                | 345 | 44                                | 20 | 62                   | 28 | 165                     | 75 | 141                     | 64 | 209                     | 94  | 245                     | 111 | 1'-2 7/8  | 378 | 3'-5 9/16 | 1050 | 2'-9 11/16 | 856 |
| 120          | 915                | 415 | 44                                | 20 | 62                   | 28 | 199                     | 90 | 170                     | 77 | 252                     | 114 | 294                     | 134 | 2'-10 7/8 | 885 | 4'-1 5/16 | 1253 | 3'-0 3/8   | 924 |
| 150          | 930                | 422 | 44                                | 20 | 62                   | 28 | 202                     | 92 | 172                     | 78 | 256                     | 116 | 300                     | 136 | 1'-2 7/8  | 378 | 4'-1 5/16 | 1253 | 3'-0 3/8   | 924 |

|   |                                          |
|---|------------------------------------------|
| A | 1 3/8" Dia. [35] Field Power Supply Hole |
| B | 2 1/2" Dia. [64] Power Supply Knockout   |
| C | 1 3/4" Dia. [44] Charging Port Hole      |
| D | 7/8" Dia. [22] Field Control Wiring Hole |
| E | 3/4" — 14 NPT Condensate Drain           |
| F | 2" Dia. [51] Power Supply Knockout       |

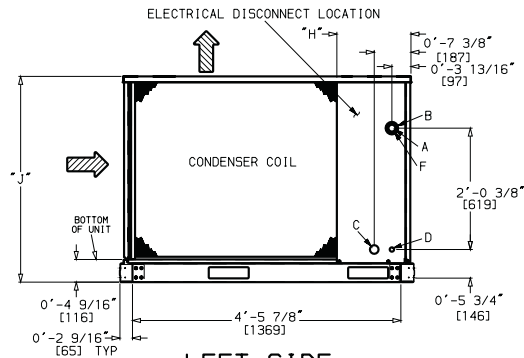
## NOTES:

- Dimensions in [ ] are in millimeters.
-  Center of gravity.
-  Direction of airflow.
- Ductwork to be attached to accessory roof curb only.
- Minimum clearance (local codes or jurisdiction may prevail):
  - Bottom to combustible surfaces (when not using curb) 0 inches, on horizontal discharge units with electric heat 1 in. clearance to ductwork for 1 ft.
  - Condenser coil, for proper airflow, 36 in. one side, 12 in. the other. The side getting the greater clearance is optional.
  - Overhead, 60 in. to assure proper condenser fan operation.
  - Between units, control box side, 42 in. per NEC (National Electrical Code).
  - Between unit and ungrounded surfaces, control box side, 36 in. per NEC.
  - Between unit and block or concrete walls and other grounded surfaces, control box side, 42 in. per NEC.
  - Horizontal supply and return end, 0 inches.
- With the exception of the clearance for the condenser coil as stated in Note 5b, a removable fence or barricade requires no clearance.
- Units may be installed on combustible floors made from wood or Class A, B, or C roof covering material.
- The vertical center of gravity is 1'-7 1/2" [495] for 090 and 102, 2'-0" [610] for 120 and 150 up from the bottom of the base rail.

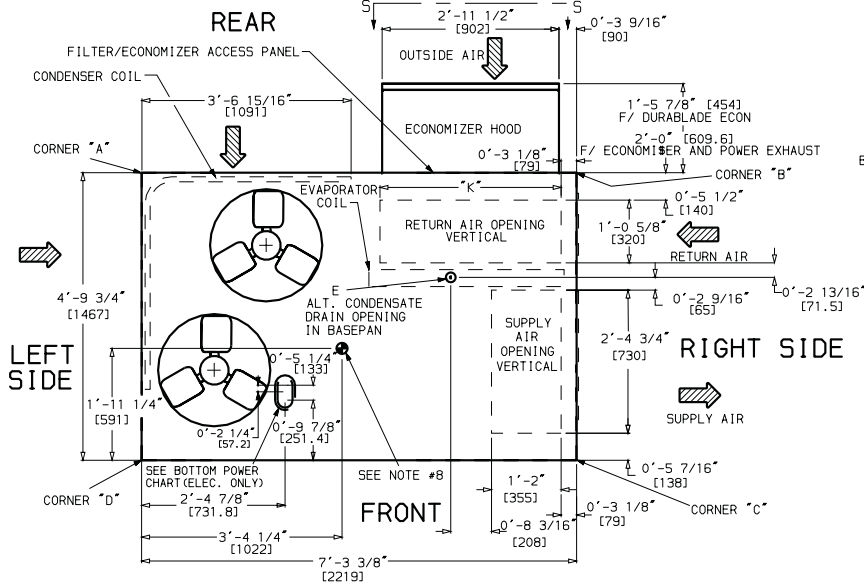
BOTTOM POWER CHART, THESE HOLES REQ'D FOR USE  
WITH ACCESSORY PACKAGES — CRBTMPWR001A00 (1/2", 3/4")  
OR CRBTMPWR002A00 (1/2", 1 1/4")

| THREADED<br>CONDUIT SIZE | WIRE USE | REQ'D HOLE SIZES<br>(Max.) |
|--------------------------|----------|----------------------------|
| 1/2"                     | 24 V     | 7/8" [22.2]                |
| 3/4"                     | Power*   | 1 1/8" [28.4]              |
| 1 1/4"                   | Power*   | 1 3/4" [44.4]              |

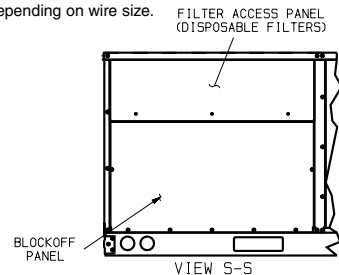
\*Select either 3/4" or 1 1/4" for power, depending on wire size.



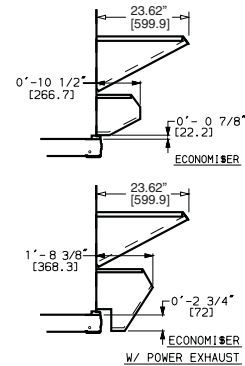
LEFT SIDE



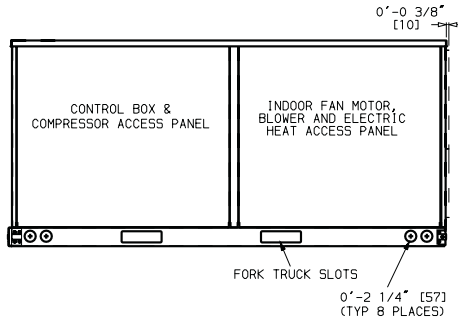
REAR



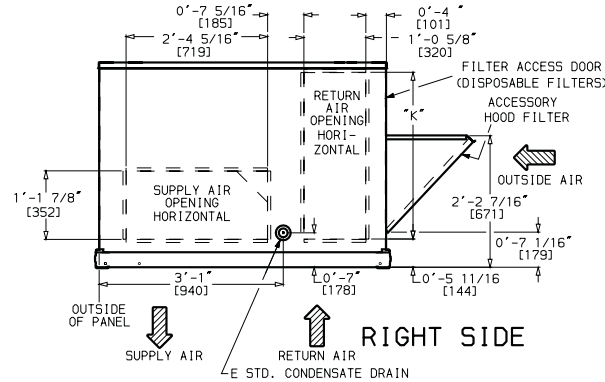
VIEW S-S



RIGHT SIDE



FRONT



RIGHT SIDE

551B090-150

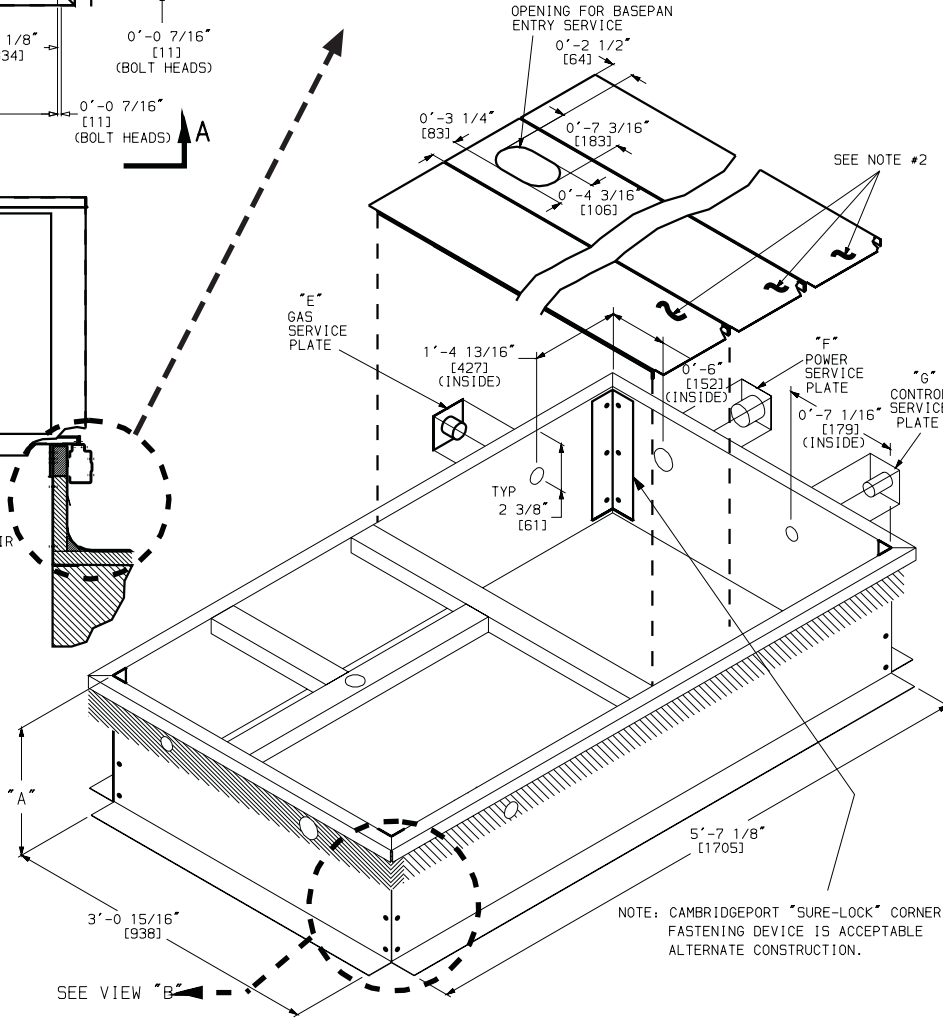
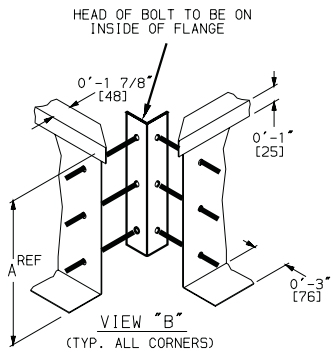
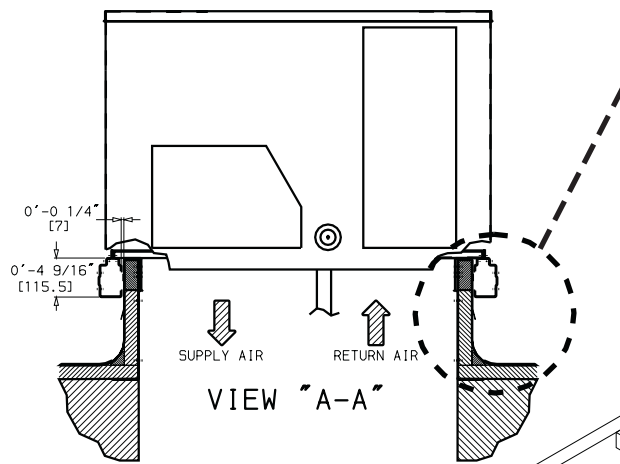
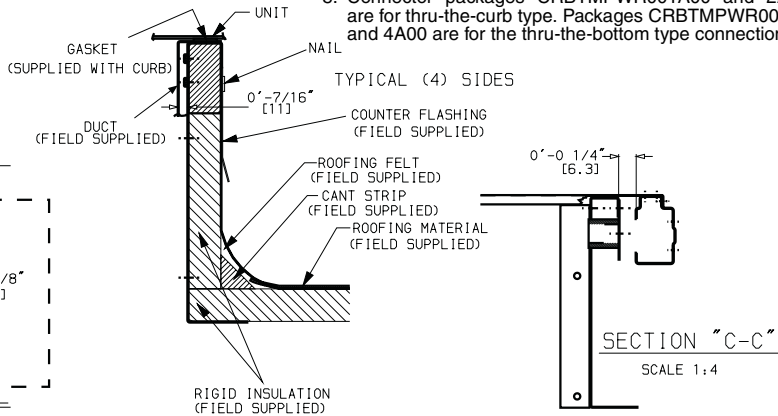
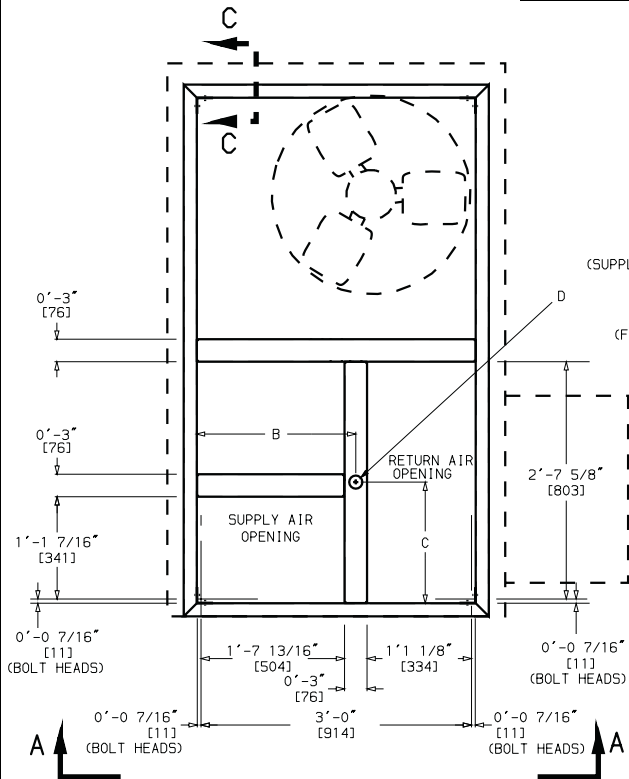
## ACCESSORY DIMENSIONS

| UNIT<br>SIZE<br>551B | "A"         | ROOF CURB<br>ACCESSORY |
|----------------------|-------------|------------------------|
| 036-072              | 1'-2" [356] | CRRFCURB001A00         |
|                      | 2'-0" [610] | CRRFCURB002A00         |

| "B"                                           | "C"            | "D" ALT<br>DRAIN<br>HOLE             | "E"<br>GAS      | "F"<br>POWER                                            | CONTROL         | CONNECTOR<br>ACY PKG             |
|-----------------------------------------------|----------------|--------------------------------------|-----------------|---------------------------------------------------------|-----------------|----------------------------------|
| 1'-9 <sup>11</sup> / <sub>16</sub> "<br>[551] | 1'-4"<br>[406] | 1 <sup>3</sup> / <sub>4</sub> " [45] | 3/4" [19] NPT   | 3/4" [19] NPT<br>1 <sup>1</sup> / <sub>4</sub> " [31.7] | 1/2" [12.7] NPT | CRBTMPWR001A00<br>CRBTMPWR002A00 |
|                                               |                |                                      | 1/2" [12.7] NPT | 3/4" [19] NPT                                           |                 | CRBTMPWR003A00                   |
|                                               |                |                                      | 3/4" [19] NPT   | 1 <sup>1</sup> / <sub>4</sub> " [31.7]                  |                 | CRBTMPWR004A00                   |

**NOTES:**

1. Roof curb accessory is shipped unassembled.
2. Insulated panels.
3. Dimensions in [ ] are in millimeters.
4. Roof curb: galvanized steel.
5. Attach ductwork to curb (flanges of duct rest on curb).
6. Service clearance 4 ft on each side.
7.  Direction of airflow.
8. Connector packages CRBTMPWR001A00 and 2A00 are for thru-the-curb type. Packages CRBTMPWR0300 and 4A00 are for the thru-the-bottom type connections.



## Roof Curb — 551B036-072

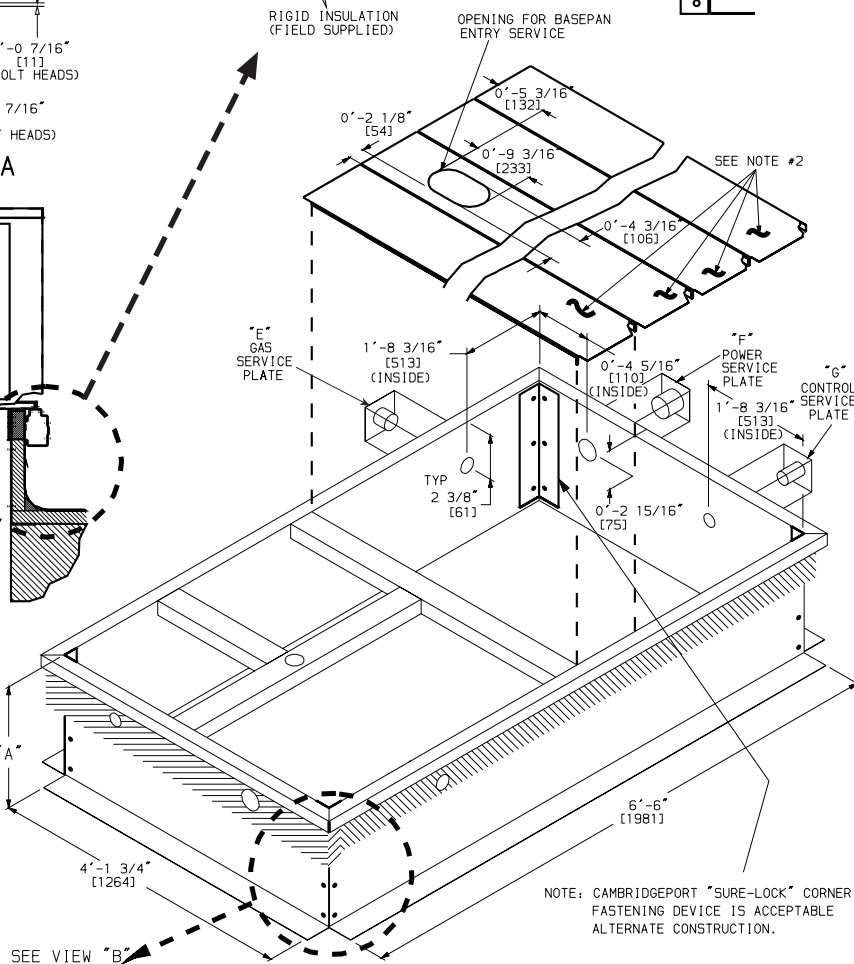
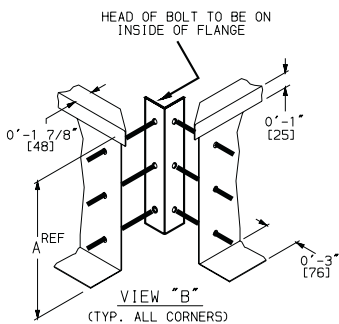
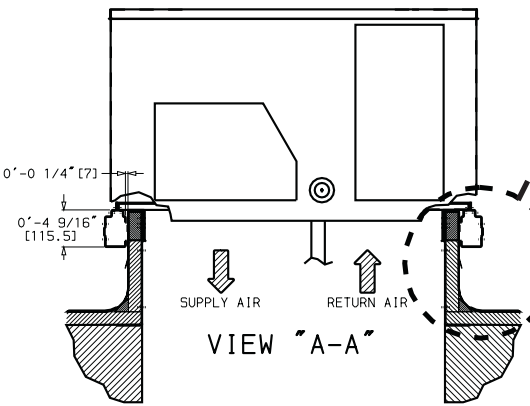
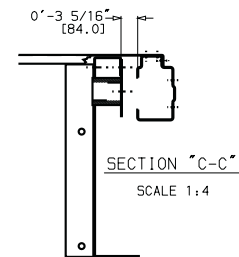
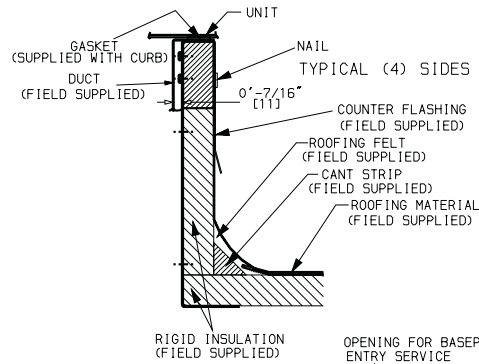
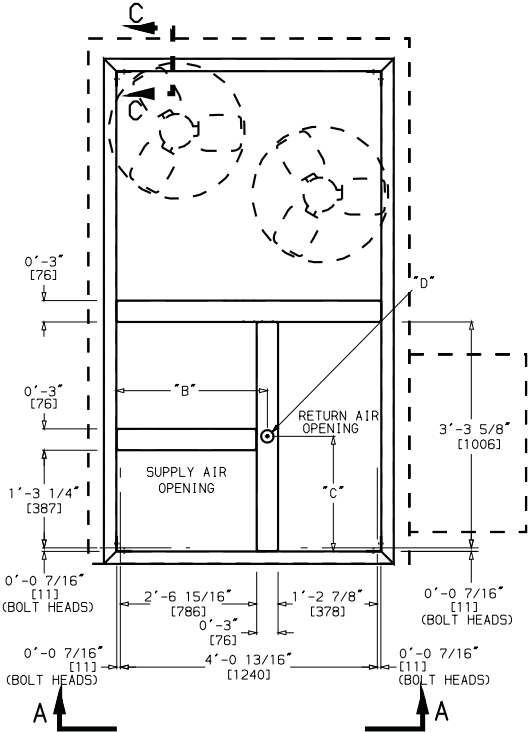
## ACCESSORY DIMENSIONS (cont)

| UNIT SIZE<br>551B | “A”         | ROOF CURB<br>ACCESSORY |
|-------------------|-------------|------------------------|
| 090-150           | 1'-2" [356] | CRRFCURB003A00         |
|                   | 2'-0" [610] | CRRFCURB004A00         |

| UNIT SIZE<br>551B | “B”                | “C”                  | “D” ALT<br>DRAIN<br>HOLE | “E”<br>GAS       | “F”<br>POWER                    | “G”<br>CONTROL   | CONNECTOR<br>ACY PKG |
|-------------------|--------------------|----------------------|--------------------------|------------------|---------------------------------|------------------|----------------------|
| 090-150           | 2'-87/16"<br>[827] | 1'-1015/16"<br>[583] | 13/4" [44.5]             | 3/4" [19]<br>NPT | 1" [25] NPT                     | 3/4" [19]<br>NPT | CRBTMPWR001A00       |
|                   |                    |                      |                          | —                | 1" [25] NPT or<br>2" [50.8] NPT |                  | CRBTMPWR002A00       |

**NOTES:**

1. Roof curb accessory is shipped disassembled.
2. Insulated panels. 1 in. thick polyurethane foam, 1 3/4 in density.
3. Dimensions in [ ] are in millimeters.
4. Roof curb: 16 gage steel.
5. Attach ductwork to curb (flanges of duct rest on curb).
6. Service clearance 4 ft on each side.
7.  Direction of airflow.
8. Place unit as close to edge of curb as possible.



### Roof Curb — 551B090-150



**PERFORMANCE DATA**  
**COOLING CAPACITIES, STANDARD UNITS**

| 551B036 (3 TONS)                          |     |                                           |      |      |      |           |      |      |      |           |      |      |      |
|-------------------------------------------|-----|-------------------------------------------|------|------|------|-----------|------|------|------|-----------|------|------|------|
| Temp (F)<br>Air Ent<br>Condenser<br>(Edb) |     | Temp (F) Air Entering Evaporator — Cfm/BF |      |      |      |           |      |      |      |           |      |      |      |
|                                           |     | 900/0.14                                  |      |      |      | 1200/0.17 |      |      |      | 1500/0.20 |      |      |      |
|                                           |     | Temp (F) Air Entering Evaporator — Ewb    |      |      |      |           |      |      |      |           |      |      |      |
|                                           |     | 78                                        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   |
| 75                                        | TC  | 45.6                                      | 41.9 | 38.7 | 35.7 | 46.8      | 43.5 | 40.8 | 37.7 | 48.1      | 44.8 | 41.8 | 39.0 |
|                                           | SHC | 14.5                                      | 20.4 | 25.2 | 29.7 | 14.7      | 21.8 | 28.2 | 33.8 | 14.8      | 23.3 | 30.7 | 37.0 |
|                                           | kW  | 2.24                                      | 2.19 | 2.16 | 2.12 | 2.26      | 2.21 | 2.18 | 2.15 | 2.28      | 2.23 | 2.19 | 2.16 |
| 85                                        | TC  | 44.4                                      | 40.7 | 37.5 | 34.5 | 45.7      | 42.1 | 39.3 | 36.4 | 47.0      | 43.5 | 40.4 | 37.6 |
|                                           | SHC | 14.1                                      | 19.9 | 24.7 | 29.2 | 14.4      | 21.5 | 27.7 | 33.2 | 14.8      | 23.2 | 30.3 | 36.4 |
|                                           | kW  | 2.51                                      | 2.46 | 2.42 | 2.39 | 2.53      | 2.47 | 2.44 | 2.41 | 2.54      | 2.50 | 2.45 | 2.42 |
| 95                                        | TC  | 42.9                                      | 39.3 | 36.1 | 33.1 | 44.6      | 40.8 | 37.8 | 34.9 |           | 42.0 | 38.9 | 36.1 |
|                                           | SHC | 13.6                                      | 19.5 | 24.1 | 28.4 | 14.0      | 21.1 | 27.2 | 32.5 |           | 22.8 | 29.9 | 35.6 |
|                                           | kW  | 2.80                                      | 2.75 | 2.71 | 2.66 | 2.83      | 2.77 | 2.73 | 2.69 |           | 2.79 | 2.74 | 2.71 |
| 105                                       | TC  | 41.3                                      | 37.7 | 34.6 | 31.7 |           | 39.3 | 36.2 | 33.4 |           | 40.1 | 37.2 | 34.7 |
|                                           | SHC | 13.0                                      | 18.8 | 23.5 | 27.8 |           | 20.7 | 26.6 | 31.8 |           | 22.1 | 29.3 | 34.7 |
|                                           | kW  | 3.11                                      | 3.06 | 3.02 | 2.98 |           | 3.09 | 3.04 | 3.01 |           | 3.10 | 3.06 | 3.03 |
| 115                                       | TC  |                                           | 36.0 | 33.0 | 29.7 |           | 37.4 | 34.5 | 31.5 |           | 38.1 | 35.5 | 33.2 |
|                                           | SHC |                                           | 18.3 | 22.9 | 26.7 |           | 19.9 | 26.1 | 30.9 |           | 21.3 | 28.7 | 33.2 |
|                                           | kW  |                                           | 3.41 | 3.36 | 3.31 |           | 3.43 | 3.39 | 3.34 |           | 3.44 | 3.41 | 3.37 |
| 125                                       | TC  |                                           | 34.2 | 31.3 | 27.8 |           | 35.6 | 32.7 | 29.4 |           | 36.3 | 33.6 | 31.9 |
|                                           | SHC |                                           | 17.6 | 22.2 | 25.8 |           | 19.4 | 25.4 | 29.4 |           | 20.8 | 28.0 | 31.8 |
|                                           | kW  |                                           | 3.78 | 3.73 | 3.66 |           | 3.80 | 3.76 | 3.71 |           | 3.81 | 3.78 | 3.75 |

| 551B048 (4 TONS)                          |     |                                           |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|-------------------------------------------|-----|-------------------------------------------|------|------|------|-----------|------|------|------|-----------|------|------|------|-----------|------|------|------|
| Temp (F)<br>Air Ent<br>Condenser<br>(Edb) |     | Temp (F) Air Entering Evaporator — Cfm/BF |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |     | 1200/0.17                                 |      |      |      | 1450/0.19 |      |      |      | 1600/0.21 |      |      |      | 2000/0.24 |      |      |      |
|                                           |     | Temp (F) Air Entering Evaporator — Ewb    |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |     | 78                                        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   |
| 75                                        | TC  | 58.6                                      | 54.0 | 50.7 | 44.2 | 59.6      | 55.9 | 52.2 | 47.7 | 59.9      | 56.4 | 52.8 | 49.1 | 61.5      | 58.1 | 54.5 | 50.6 |
|                                           | SHC | 18.3                                      | 26.1 | 32.7 | 37.5 | 18.7      | 27.6 | 35.1 | 41.8 | 18.7      | 28.2 | 36.2 | 43.8 | 19.2      | 30.2 | 39.5 | 47.5 |
|                                           | kW  | 2.80                                      | 2.80 | 2.80 | 2.80 | 2.90      | 2.80 | 2.80 | 2.80 | 2.90      | 2.80 | 2.80 | 2.80 | 2.90      | 2.80 | 2.80 | 2.80 |
| 85                                        | TC  | 56.4                                      | 52.2 | 48.9 | 41.9 | 57.3      | 54.1 | 50.4 | 45.9 | 58.1      | 54.5 | 51.0 | 47.2 | 59.5      | 55.3 | 52.3 | 48.7 |
|                                           | SHC | 17.6                                      | 25.4 | 32.0 | 36.4 | 17.9      | 26.9 | 34.5 | 40.8 | 18.2      | 27.5 | 35.7 | 42.8 | 18.5      | 28.6 | 38.5 | 46.6 |
|                                           | kW  | 3.30                                      | 3.20 | 3.20 | 3.20 | 3.30      | 3.20 | 3.20 | 3.20 | 3.30      | 3.20 | 3.20 | 3.20 | 3.30      | 3.20 | 3.20 | 3.20 |
| 95                                        | TC  | 54.2                                      | 50.7 | 46.9 | 39.5 | 55.0      | 51.9 | 48.4 | 43.5 | 56.3      | 52.5 | 48.9 | 45.2 | 57.5      | 53.9 | 50.1 | 46.7 |
|                                           | SHC | 16.9                                      | 24.9 | 31.1 | 35.0 | 17.2      | 26.1 | 33.6 | 39.6 | 17.6      | 26.8 | 34.7 | 41.8 | 17.8      | 28.8 | 37.5 | 45.6 |
|                                           | kW  | 3.70                                      | 3.60 | 3.60 | 3.60 | 3.70      | 3.70 | 3.60 | 3.60 | 3.70      | 3.70 | 3.60 | 3.60 | 3.70      | 3.70 | 3.60 | 3.60 |
| 105                                       | TC  | 52.0                                      | 48.8 | 44.5 | 36.7 | 52.7      | 49.8 | 46.2 | 40.7 | 53.8      | 50.2 | 46.7 | 42.1 | 54.7      | 51.5 | 48.2 | 44.7 |
|                                           | SHC | 16.2                                      | 24.3 | 30.2 | 33.6 | 16.5      | 25.3 | 32.8 | 38.2 | 16.8      | 26.0 | 33.9 | 40.3 | 17.1      | 27.9 | 37.4 | 44.4 |
|                                           | kW  | 4.20                                      | 4.10 | 4.10 | 4.00 | 4.20      | 4.10 | 4.10 | 4.10 | 4.20      | 4.10 | 4.10 | 4.10 | 4.20      | 4.10 | 4.10 | 4.10 |
| 115                                       | TC  | 49.9                                      | 46.5 | 41.1 | 34.3 | 50.4      | 47.7 | 43.3 | 37.0 | 41.3      | 48.0 | 44.4 | 38.5 | 51.9      | 48.9 | 45.7 | 42.0 |
|                                           | SHC | 15.5                                      | 23.4 | 28.9 | 32.4 | 15.8      | 24.9 | 31.8 | 36.3 | 16.0      | 25.4 | 33.4 | 38.3 | 16.3      | 27.1 | 36.9 | 42.0 |
|                                           | kW  | 4.70                                      | 4.60 | 4.60 | 4.50 | 4.70      | 4.70 | 4.60 | 4.60 | 4.70      | 4.60 | 4.60 | 4.60 | 4.70      | 4.70 | 4.60 | 4.60 |
| 125                                       | TC  | 47.5                                      | 43.8 | 37.5 | 32.4 |           | 45.1 | 39.0 | 33.8 |           | 45.3 | 40.1 | 35.4 |           | 46.3 | 42.6 | 38.8 |
|                                           | SHC | 15.0                                      | 22.5 | 27.4 | 31.5 |           | 24.1 | 30.2 | 33.7 |           | 24.7 | 31.9 | 35.4 |           | 26.5 | 35.9 | 38.8 |
|                                           | kW  | 5.20                                      | 5.20 | 5.10 | 5.10 |           | 5.20 | 5.20 | 5.10 |           | 5.20 | 5.20 | 5.10 |           | 5.20 | 5.20 | 5.20 |

Do not operate at these conditions.

**LEGEND**

BF — Bypass Factor  
Edb — Entering Dry Bulb  
Ewb — Entering Wet Bulb  
kW — Compressor Motor Power Input  
SHC — Sensible Heat Capacity (1000 Btuh) Gross  
TC — Total Capacity (1000 Btuh) Gross

**NOTES:**

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible heat capacity (Btuh)}}{1.1 \times \text{cfm}}$$

$$t_{lwb} = \text{wet-bulb temperature corresponding to enthalpy of air leaving indoor coil (} h_{lwb} \text{)}$$

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

where  $h_{ewb}$  = enthalpy of air entering indoor coil

3. The SHC is based on 80 F edb temperature of air entering evaporator coil.  
Below 80 F db, subtract (corr factor x cfm) from SHC.  
Above 80 F db, add (corr factor x cfm) to SHC.  
Correction Factor =  $1.10 \times (1 - BF) \times (db - 80)$

**PERFORMANCE DATA (cont)**  
**COOLING CAPACITIES, STANDARD UNITS (cont)**

| 551B060 (5 TONS)                          |                 |                                           |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|-------------------------------------------|-----------------|-------------------------------------------|------|------|------|-----------|------|------|------|-----------|------|------|------|-----------|------|------|------|
| Temp (F)<br>Air Ent<br>Condenser<br>(Edb) |                 | Temp (F) Air Entering Evaporator — Cfm/BF |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |                 | 1500/0.08                                 |      |      |      | 1750/0.09 |      |      |      | 2000/0.11 |      |      |      | 2500/0.13 |      |      |      |
|                                           |                 | Temp (F) Air Entering Evaporator — Ewb    |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |                 | 78                                        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   |
| 75                                        | TC<br>SHC<br>kW | 80.4                                      | 70.8 | 65.4 | 58.5 | 82.5      | 72.5 | 67.3 | 61.1 | 83.7      | 73.0 | 68.4 | 62.8 |           | 74.8 | 70.3 | 64.8 |
|                                           |                 | 25.6                                      | 34.1 | 42.7 | 49.9 | 26.1      | 35.7 | 45.5 | 54.2 | 26.3      | 36.8 | 48.0 | 57.8 |           | 39.6 | 53.0 | 63.4 |
|                                           |                 | 3.65                                      | 3.53 | 3.49 | 3.44 | 3.68      | 3.55 | 3.50 | 3.46 | 3.70      | 3.55 | 3.51 | 3.47 |           | 3.57 | 3.54 | 3.48 |
| 85                                        | TC<br>SHC<br>kW | 78.5                                      | 68.9 | 63.2 | 55.3 |           | 70.5 | 65.1 | 57.9 |           | 72.2 | 66.4 | 60.2 |           | 73.2 | 68.1 | 62.9 |
|                                           |                 | 25.1                                      | 33.5 | 41.8 | 48.4 |           | 35.0 | 44.8 | 52.8 |           | 37.0 | 47.6 | 56.8 |           | 39.3 | 52.5 | 62.4 |
|                                           |                 | 4.20                                      | 3.98 | 3.94 | 3.87 |           | 4.00 | 3.96 | 3.90 |           | 4.03 | 3.97 | 3.92 |           | 4.04 | 3.99 | 3.94 |
| 95                                        | TC<br>SHC<br>kW |                                           | 66.8 | 60.6 | 52.4 |           | 68.3 | 62.5 | 54.3 |           | 69.3 | 63.8 | 56.6 |           | 71.2 | 65.6 | 60.6 |
|                                           |                 |                                           | 32.8 | 40.7 | 47.0 |           | 34.5 | 43.8 | 51.1 |           | 36.0 | 46.7 | 55.0 |           | 39.1 | 51.8 | 60.5 |
|                                           |                 |                                           | 4.48 | 4.43 | 4.35 |           | 4.50 | 4.45 | 4.37 |           | 4.51 | 4.46 | 4.40 |           | 4.55 | 4.48 | 4.44 |
| 105                                       | TC<br>SHC<br>kW |                                           | 64.3 | 57.7 | 49.9 |           | 65.9 | 59.8 | 51.7 |           | 66.9 | 61.1 | 54.1 |           | 68.4 | 62.8 | 58.4 |
|                                           |                 |                                           | 32.0 | 39.6 | 45.8 |           | 33.7 | 42.8 | 49.7 |           | 35.3 | 45.7 | 53.5 |           | 38.4 | 51.0 | 58.4 |
|                                           |                 |                                           | 5.03 | 4.96 | 4.87 |           | 5.05 | 4.99 | 4.90 |           | 5.06 | 5.00 | 4.93 |           | 5.08 | 5.02 | 4.98 |
| 115                                       | TC<br>SHC<br>kW |                                           | 61.5 | 54.8 | 47.3 |           | 62.8 | 56.7 | 49.1 |           | 64.0 | 58.2 | 51.6 |           | 65.4 | 59.9 | 56.1 |
|                                           |                 |                                           | 31.0 | 38.4 | 44.5 |           | 32.5 | 41.6 | 48.2 |           | 34.4 | 44.6 | 51.6 |           | 37.4 | 50.0 | 56.1 |
|                                           |                 |                                           | 5.61 | 5.55 | 5.46 |           | 5.62 | 5.58 | 5.49 |           | 5.65 | 5.60 | 5.52 |           | 5.67 | 5.61 | 5.57 |
| 125                                       | TC<br>SHC<br>kW |                                           | 58.7 | 51.6 | 44.5 |           | 59.9 | 53.4 | 46.2 |           | 60.8 | 54.9 | 49.0 |           | 62.2 | 56.8 | 53.5 |
|                                           |                 |                                           | 30.0 | 37.2 | 43.1 |           | 31.7 | 40.4 | 46.2 |           | 33.3 | 43.4 | 48.9 |           | 36.4 | 48.9 | 53.4 |
|                                           |                 |                                           | 6.27 | 6.19 | 6.09 |           | 6.28 | 6.21 | 6.13 |           | 6.29 | 6.24 | 6.17 |           | 6.31 | 6.27 | 6.22 |

| 551B072 (6 TONS)                          |                 |                                           |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|-------------------------------------------|-----------------|-------------------------------------------|------|------|------|-----------|------|------|------|-----------|------|------|------|-----------|------|------|------|
| Temp (F)<br>Air Ent<br>Condenser<br>(Edb) |                 | Temp (F) Air Entering Evaporator — Cfm/BF |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |                 | 1800/0.05                                 |      |      |      | 2100/0.06 |      |      |      | 2400/0.06 |      |      |      | 3000/0.08 |      |      |      |
|                                           |                 | Temp (F) Air Entering Evaporator — Ewb    |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |                 | 78                                        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   |
| 75                                        | TC<br>SHC<br>kW | 93.5                                      | 86.7 | 80.7 | 74.4 | 95.3      | 88.8 | 82.7 | 76.6 | 97.3      | 90.5 | 84.4 | 78.2 |           | 92.6 | 86.3 | 81.0 |
|                                           |                 | 29.9                                      | 43.0 | 53.7 | 63.8 | 30.1      | 45.0 | 57.4 | 68.9 | 30.7      | 47.2 | 61.2 | 73.6 |           | 51.2 | 67.4 | 80.7 |
|                                           |                 | 4.73                                      | 4.58 | 4.46 | 4.33 | 4.77      | 4.63 | 4.50 | 4.38 | 4.82      | 4.67 | 4.55 | 4.41 |           | 4.72 | 4.58 | 4.47 |
| 85                                        | TC<br>SHC<br>kW | 91.3                                      | 84.1 | 78.2 | 72.0 | 93.0      | 86.4 | 80.3 | 74.1 |           | 88.2 | 81.7 | 75.7 |           | 90.2 | 84.0 | 78.8 |
|                                           |                 | 29.2                                      | 42.0 | 52.6 | 62.7 | 29.6      | 44.5 | 56.6 | 68.0 |           | 46.8 | 60.2 | 72.5 |           | 50.6 | 67.4 | 78.7 |
|                                           |                 | 5.29                                      | 5.10 | 4.97 | 4.85 | 5.34      | 5.16 | 5.03 | 4.90 |           | 5.21 | 5.06 | 4.93 |           | 5.26 | 5.12 | 4.99 |
| 95                                        | TC<br>SHC<br>kW | 89.0                                      | 81.3 | 75.3 | 69.2 |           | 83.4 | 77.3 | 71.3 |           | 85.1 | 78.9 | 72.9 |           | 87.2 | 80.6 | 76.2 |
|                                           |                 | 28.4                                      | 41.0 | 51.4 | 61.4 |           | 43.4 | 55.3 | 66.6 |           | 45.8 | 59.2 | 71.2 |           | 50.2 | 65.8 | 76.2 |
|                                           |                 | 5.85                                      | 5.65 | 5.52 | 5.39 |           | 5.71 | 5.57 | 5.44 |           | 5.77 | 5.62 | 5.48 |           | 5.83 | 5.66 | 5.55 |
| 105                                       | TC<br>SHC<br>kW |                                           | 77.9 | 72.0 | 66.1 |           | 80.0 | 73.8 | 68.0 |           | 81.6 | 75.3 | 69.6 |           | 83.4 | 77.1 | 73.2 |
|                                           |                 |                                           | 39.7 | 50.2 | 60.0 |           | 42.2 | 54.0 | 65.2 |           | 44.6 | 57.8 | 69.3 |           | 49.0 | 64.5 | 73.2 |
|                                           |                 |                                           | 6.22 | 6.08 | 5.94 |           | 6.29 | 6.13 | 6.00 |           | 6.34 | 6.17 | 6.04 |           | 6.40 | 6.22 | 6.12 |
| 115                                       | TC<br>SHC<br>kW |                                           | 74.7 | 68.4 | 61.8 |           | 75.9 | 70.0 | 64.1 |           | 77.6 | 71.3 | 66.5 |           | 78.7 | 73.0 | 70.1 |
|                                           |                 |                                           | 38.7 | 48.8 | 58.1 |           | 40.8 | 52.6 | 63.2 |           | 43.3 | 56.4 | 66.4 |           | 46.9 | 63.2 | 70.0 |
|                                           |                 |                                           | 6.84 | 6.68 | 6.49 |           | 6.87 | 6.71 | 6.56 |           | 6.93 | 6.75 | 6.63 |           | 6.96 | 6.80 | 6.72 |
| 125                                       | TC<br>SHC<br>kW |                                           | 70.3 | 63.6 | 57.2 |           | 71.8 | 65.5 | 59.1 |           | 72.9 | 66.8 | 61.9 |           | 74.0 | 68.6 | 66.4 |
|                                           |                 |                                           | 37.2 | 47.0 | 55.8 |           | 39.5 | 51.0 | 59.1 |           | 41.7 | 55.0 | 61.9 |           | 45.4 | 61.8 | 66.3 |
|                                           |                 |                                           | 7.43 | 7.25 | 7.03 |           | 7.48 | 7.30 | 7.13 |           | 7.51 | 7.35 | 7.22 |           | 7.54 | 7.41 | 7.33 |

Do not operate at these conditions.

**LEGEND**

**BF** — Bypass Factor  
**Edb** — Entering Dry Bulb  
**Ewb** — Entering Wet Bulb  
**kW** — Compressor Motor Power Input  
**SHC** — Sensible Heat Capacity (1000 Btuh) Gross  
**TC** — Total Capacity (1000 Btuh) Gross

**NOTES:**

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:  

$$t_{ldb} = t_{edb} - \frac{\text{sensible heat capacity (Btuh)}}{1.1 \times \text{cfm}}$$

$$t_{lwb} = \text{wet-bulb temperature corresponding to enthalpy of air leaving indoor coil (} h_{lwb} \text{)}$$

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

where  $h_{ewb}$  = enthalpy of air entering indoor coil
3. The SHC is based on 80 F edb temperature of air entering evaporator coil.  
Below 80 F db, subtract (corr factor x cfm) from SHC.  
Above 80 F db, add (corr factor x cfm) to SHC.  
Correction Factor =  $1.10 \times (1 - BF) \times (db - 80)$

**PERFORMANCE DATA (cont)**  
**COOLING CAPACITIES, STANDARD UNITS (cont)**

| 551B090 (7 1/2 TONS)                      |     |                                           |       |      |      |            |       |      |      |            |       |       |      |
|-------------------------------------------|-----|-------------------------------------------|-------|------|------|------------|-------|------|------|------------|-------|-------|------|
| Temp (F)<br>Air Ent<br>Condenser<br>(Edb) |     | Temp (F) Air Entering Evaporator — Cfm/BF |       |      |      |            |       |      |      |            |       |       |      |
|                                           |     | 2250/0.095                                |       |      |      | 3000/0.110 |       |      |      | 3750/0.135 |       |       |      |
|                                           |     | Temp (F) Air Entering Evaporator — Ewb    |       |      |      |            |       |      |      |            |       |       |      |
|                                           |     | 78                                        | 72    | 67   | 62   | 78         | 72    | 67   | 62   | 78         | 72    | 67    | 62   |
| 75                                        | TC  | 111.9                                     | 105.5 | 96.9 | 87.6 | 113.3      | 107.3 | 99.6 | 90.7 | 114.7      | 110.3 | 101.9 | 93.8 |
|                                           | SHC | 35.4                                      | 50.6  | 63.6 | 75.7 | 35.9       | 53.3  | 69.2 | 83.7 | 38.8       | 58.0  | 76.6  | 92.2 |
|                                           | kW  | 5.15                                      | 5.15  | 5.07 | 5.04 | 5.42       | 5.16  | 5.11 | 5.06 | 5.68       | 5.20  | 5.13  | 5.07 |
| 85                                        | TC  | 108.8                                     | 102.5 | 93.6 | 83.6 | 111.9      | 105.1 | 96.5 | 87.5 | 114.1      | 107.7 | 99.0  | 90.6 |
|                                           | SHC | 34.4                                      | 49.7  | 62.4 | 73.9 | 35.3       | 52.8  | 68.4 | 82.2 | 35.7       | 57.3  | 75.9  | 90.0 |
|                                           | kW  | 5.86                                      | 5.86  | 5.79 | 5.73 | 6.15       | 5.89  | 5.82 | 5.77 | 6.43       | 5.93  | 5.86  | 5.78 |
| 95                                        | TC  | 107.4                                     | 98.9  | 90.1 | 79.3 | 109.3      | 101.6 | 92.9 | 83.5 | 110.8      | 103.8 | 95.3  | 87.4 |
|                                           | SHC | 34.0                                      | 48.5  | 61.2 | 71.9 | 34.3       | 51.9  | 67.2 | 80.2 | 34.9       | 56.2  | 74.9  | 87.3 |
|                                           | kW  | 6.69                                      | 6.65  | 6.58 | 6.49 | 6.94       | 6.69  | 6.61 | 6.53 | 7.21       | 6.72  | 6.64  | 6.57 |
| 105                                       | TC  | 103.4                                     | 95.3  | 86.2 | 75.7 |            | 97.6  | 88.8 | 79.6 |            | 100.0 | 91.0  | 84.1 |
|                                           | SHC | 32.6                                      | 47.3  | 59.6 | 70.2 |            | 50.7  | 65.9 | 78.0 |            | 55.3  | 73.6  | 84.1 |
|                                           | kW  | 7.52                                      | 7.51  | 7.44 | 7.31 |            | 7.55  | 7.48 | 7.36 |            | 7.59  | 7.50  | 7.41 |
| 115                                       | TC  |                                           | 91.0  | 82.0 | 71.6 |            | 93.2  | 84.5 | 75.4 |            | 95.6  | 86.6  | 80.7 |
|                                           | SHC |                                           | 45.9  | 58.0 | 68.1 |            | 49.3  | 64.2 | 75.3 |            | 54.2  | 72.1  | 80.7 |
|                                           | kW  |                                           | 8.43  | 8.33 | 8.20 |            | 8.46  | 8.37 | 8.27 |            | 8.52  | 8.42  | 8.34 |
| 125                                       | TC  |                                           | 86.2  | 77.8 | 68.1 |            | 88.3  | 80.0 | 71.9 |            | 90.0  | 81.9  | 77.2 |
|                                           | SHC |                                           | 44.1  | 56.4 | 66.3 |            | 47.5  | 62.6 | 71.8 |            | 52.1  | 70.1  | 77.2 |
|                                           | kW  |                                           | 9.38  | 9.29 | 9.14 |            | 9.43  | 9.34 | 9.24 |            | 9.47  | 9.38  | 9.32 |

| 551B102 (8½ TONS)                         |                 |                                           |       |       |       |           |       |       |       |            |       |       |       |            |       |       |       |
|-------------------------------------------|-----------------|-------------------------------------------|-------|-------|-------|-----------|-------|-------|-------|------------|-------|-------|-------|------------|-------|-------|-------|
| Temp (F)<br>Air Ent<br>Condenser<br>(Edb) |                 | Temp (F) Air Entering Evaporator — Cfm/BF |       |       |       |           |       |       |       |            |       |       |       |            |       |       |       |
|                                           |                 | 2550/0.075                                |       |       |       | 3000/0.09 |       |       |       | 3400/0.105 |       |       |       | 4250/0.125 |       |       |       |
|                                           |                 | Temp (F) Air Entering Evaporator — Ewb    |       |       |       |           |       |       |       |            |       |       |       |            |       |       |       |
|                                           |                 | 78                                        | 72    | 67    | 62    | 78        | 72    | 67    | 62    | 78         | 72    | 67    | 62    | 78         | 72    | 67    | 62    |
| 75                                        | TC<br>SHC<br>kW | 128.1                                     | 119.5 | 105.7 | 94.8  | 129.8     | 123.1 | 109.1 | 98.7  | 130.3      | 124.8 | 110.7 | 100.2 | 131.3      | 126.3 | 112.8 | 103.4 |
|                                           |                 | 37.4                                      | 56.5  | 65.7  | 77.8  | 37.8      | 60.2  | 71.7  | 86.3  | 37.9       | 62.2  | 75.8  | 92.8  | 41.0       | 67.8  | 83.3  | 101.2 |
|                                           |                 | 5.92                                      | 5.92  | 5.84  | 5.77  | 6.11      | 5.95  | 5.88  | 5.81  | 6.24       | 5.96  | 5.89  | 5.83  | 6.56       | 5.99  | 5.91  | 5.85  |
| 85                                        | TC<br>SHC<br>kW | 124.9                                     | 115.5 | 101.9 | 90.6  | 127.1     | 119.7 | 105.4 | 94.8  | 128.1      | 121.4 | 106.9 | 96.1  | 130.1      | 124.0 | 109.1 | 98.7  |
|                                           |                 | 36.5                                      | 55.1  | 64.3  | 76.1  | 36.8      | 58.9  | 70.5  | 85.1  | 36.8       | 61.3  | 74.5  | 90.5  | 39.7       | 66.2  | 82.9  | 98.5  |
|                                           |                 | 6.78                                      | 6.77  | 6.69  | 6.61  | 6.99      | 6.83  | 6.74  | 6.67  | 7.13       | 6.85  | 6.76  | 6.67  | 7.46       | 6.88  | 6.79  | 6.71  |
| 95                                        | TC<br>SHC<br>kW | 121.5                                     | 111.3 | 97.7  | 86.6  | 123.5     | 115.0 | 101.2 | 90.6  | 124.3      | 117.2 | 102.6 | 91.7  |            | 120.1 | 104.8 | 94.5  |
|                                           |                 | 35.5                                      | 53.7  | 62.8  | 74.2  | 36.0      | 57.4  | 68.9  | 82.9  | 36.1       | 60.0  | 73.0  | 88.6  |            | 65.0  | 81.5  | 94.5  |
|                                           |                 | 7.75                                      | 7.71  | 7.62  | 7.52  | 7.96      | 7.76  | 7.68  | 7.59  | 8.09       | 7.80  | 7.69  | 7.58  |            | 7.84  | 7.74  | 7.66  |
| 105                                       | TC<br>SHC<br>kW | 117.0                                     | 107.2 | 93.5  | 82.5  |           | 110.5 | 96.7  | 85.9  |            | 112.1 | 97.9  | 87.6  |            | 114.9 | 99.9  | 90.5  |
|                                           |                 | 33.5                                      | 52.2  | 61.3  | 72.7  |           | 56.0  | 67.4  | 81.2  |            | 58.4  | 71.4  | 86.6  |            | 63.5  | 79.5  | 90.5  |
|                                           |                 | 8.78                                      | 8.75  | 8.64  | 8.54  |           | 8.80  | 8.70  | 8.61  |            | 8.82  | 8.71  | 8.62  |            | 8.86  | 8.75  | 8.67  |
| 115                                       | TC<br>SHC<br>kW |                                           | 101.9 | 89.2  | 78.0  |           | 104.7 | 91.8  | 81.5  |            | 106.7 | 93.1  | 83.3  |            | 109.2 | 94.9  | 86.3  |
|                                           |                 |                                           | 50.2  | 59.5  | 70.7  |           | 53.7  | 65.7  | 79.5  |            | 56.6  | 69.5  | 83.1  |            | 61.5  | 77.8  | 86.3  |
|                                           |                 |                                           | 8.80  | 9.73  | 9.64  |           | 9.86  | 9.79  | 9.72  |            | 9.90  | 9.79  | 9.71  |            | 9.95  | 9.84  | 9.75  |
| 125                                       | TC<br>SHC<br>kW |                                           | 97.3  | 84.3  | 73.1  |           | 100.0 | 86.8  | 76.0  |            | 101.3 | 87.9  | 78.7  |            | 102.9 | 89.5  | 81.9  |
|                                           |                 |                                           | 48.7  | 57.7  | 68.5  |           | 52.4  | 63.9  | 76.0  |            | 54.8  | 67.9  | 78.7  |            | 59.1  | 75.7  | 81.9  |
|                                           |                 |                                           | 11.03 | 10.90 | 10.70 |           | 11.08 | 10.96 | 10.81 |            | 11.11 | 10.99 | 10.88 |            | 11.14 | 11.03 | 10.93 |

Do not operate at these conditions.

**LEGEND**

**BF** — Bypass Factor  
**Edb** — Entering Dry Bulb  
**Ewb** — Entering Wet Bulb  
**kW** — Compressor Motor Power Input  
**SHC** — Sensible Heat Capacity (1000 Btuh) Gross  
**TC** — Total Capacity (1000 Btuh) Gross

**NOTES:**

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:  

$$t_{ldb} = t_{edb} - \frac{\text{sensible heat capacity (Btuh)}}{1.1 \times \text{cfm}}$$

$$t_{lwb} = \text{wet-bulb temperature corresponding to enthalpy of air leaving indoor coil (} h_{lwb} \text{)}$$

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

where  $h_{ewb}$  = enthalpy of air entering indoor coil
- The SHC is based on 80 F edb temperature of air entering evaporator coil.  
 Below 80 F db, subtract (corr factor x cfm) from SHC.  
 Above 80 F db, add (corr factor x cfm) to SHC.  
 Correction Factor =  $1.10 \times (1 - BF) \times (db - 80)$

**PERFORMANCE DATA (cont)**  
**COOLING CAPACITIES, STANDARD UNITS (cont)**

| 551B120 (10 TONS)                         |     |                                           |       |       |       |           |       |       |       |           |       |       |       |           |       |       |       |
|-------------------------------------------|-----|-------------------------------------------|-------|-------|-------|-----------|-------|-------|-------|-----------|-------|-------|-------|-----------|-------|-------|-------|
| Temp (F)<br>Air Ent<br>Condenser<br>(Edb) |     | Temp (F) Air Entering Evaporator — Cfm/BF |       |       |       |           |       |       |       |           |       |       |       |           |       |       |       |
|                                           |     | 3000/0.31                                 |       |       |       | 3200/0.34 |       |       |       | 4000/0.46 |       |       |       | 5000/0.61 |       |       |       |
|                                           |     | Temp (F) Air Entering Evaporator — Ewb    |       |       |       |           |       |       |       |           |       |       |       |           |       |       |       |
|                                           |     | 78                                        | 72    | 67    | 62    | 78        | 72    | 67    | 62    | 78        | 72    | 67    | 62    | 78        | 72    | 67    | 62    |
| 75                                        | TC  | 152.7                                     | 140.3 | 129.4 | 115.0 | 153.1     | 141.2 | 130.4 | 118.1 | 154.9     | 145.2 | 134.0 | 122.1 | 158.1     | 147.5 | 136.6 | 125.3 |
|                                           | SHC | 46.7                                      | 65.6  | 82.2  | 97.4  | 47.3      | 66.7  | 84.4  | 101.5 | 49.8      | 71.3  | 93.1  | 113.5 | 51.0      | 77.9  | 103.7 | 124.7 |
|                                           | kW  | 7.34                                      | 7.35  | 7.21  | 7.12  | 7.54      | 7.37  | 7.23  | 7.13  | 7.71      | 7.46  | 7.31  | 7.17  | 8.10      | 7.51  | 7.37  | 7.22  |
| 85                                        | TC  | 150.5                                     | 137.7 | 125.3 | 110.0 | 151.5     | 138.9 | 126.6 | 113.6 |           | 142.6 | 130.6 | 117.7 |           | 144.6 | 133.3 | 122.3 |
|                                           | SHC | 44.7                                      | 65.0  | 81.2  | 95.2  | 44.9      | 66.3  | 83.6  | 99.7  |           | 71.0  | 92.8  | 112.0 |           | 76.9  | 103.1 | 122.2 |
|                                           | kW  | 8.28                                      | 8.29  | 8.13  | 8.02  | 8.51      | 8.32  | 8.16  | 8.03  |           | 8.40  | 8.24  | 8.09  |           | 8.45  | 8.31  | 8.16  |
| 95                                        | TC  | 147.7                                     | 133.8 | 120.7 | 103.0 |           | 135.1 | 121.9 | 107.2 |           | 138.8 | 125.8 | 112.8 |           | 141.7 | 128.5 | 118.5 |
|                                           | SHC | 43.9                                      | 63.9  | 79.6  | 92.2  |           | 65.2  | 82.0  | 97.0  |           | 70.6  | 91.5  | 109.7 |           | 76.9  | 102.5 | 118.4 |
|                                           | kW  | 9.33                                      | 9.33  | 9.16  | 8.98  |           | 9.35  | 9.18  | 9.00  |           | 9.44  | 9.27  | 9.07  |           | 9.51  | 9.33  | 9.19  |
| 105                                       | TC  |                                           | 128.7 | 115.4 | 96.5  |           | 129.8 | 116.6 | 99.7  |           | 133.7 | 120.3 | 107.1 |           | 136.7 | 122.8 | 114.5 |
|                                           | SHC |                                           | 62.3  | 77.6  | 89.4  |           | 63.6  | 80.2  | 93.5  |           | 69.4  | 89.6  | 106.8 |           | 76.0  | 100.6 | 114.3 |
|                                           | kW  |                                           | 10.46 | 10.28 | 10.00 |           | 10.47 | 10.30 | 10.07 |           | 10.57 | 10.38 | 10.21 |           | 10.66 | 10.43 | 10.31 |
| 115                                       | TC  |                                           | 123.2 | 109.1 | 90.8  |           | 124.3 | 110.3 | 92.2  |           | 127.9 | 114.4 | 100.8 |           | 130.9 | 116.8 | 110.1 |
|                                           | SHC |                                           | 60.4  | 75.1  | 86.6  |           | 61.9  | 77.8  | 90.0  |           | 67.6  | 87.6  | 100.7 |           | 74.6  | 98.7  | 109.9 |
|                                           | kW  |                                           | 11.66 | 11.47 | 11.20 |           | 11.68 | 11.51 | 11.25 |           | 11.77 | 11.60 | 11.41 |           | 11.89 | 11.66 | 11.58 |
| 125                                       | TC  |                                           | 117.5 | 101.8 | 86.2  |           | 118.5 | 103.0 | 87.4  |           | 121.6 | 107.1 | 96.0  |           | 124.1 | 110.3 | 104.8 |
|                                           | SHC |                                           | 58.5  | 72.5  | 84.5  |           | 60.0  | 75.0  | 87.3  |           | 65.8  | 85.1  | 96.0  |           | 72.5  | 96.9  | 104.8 |
|                                           | kW  |                                           | 12.99 | 12.77 | 12.50 |           | 13.02 | 12.81 | 12.55 |           | 13.10 | 12.92 | 12.74 |           | 13.19 | 13.01 | 12.91 |

| 551B150 (12½ TONS)                        |                 |                                           |       |       |           |       |       |           |       |       |           |       |       |
|-------------------------------------------|-----------------|-------------------------------------------|-------|-------|-----------|-------|-------|-----------|-------|-------|-----------|-------|-------|
| Temp (F)<br>Air Ent<br>Condenser<br>(Edb) |                 | Temp (F) Air Entering Evaporator — Cfm/BF |       |       |           |       |       |           |       |       |           |       |       |
|                                           |                 | 3750/0.08                                 |       |       | 4300/0.09 |       |       | 5000/0.11 |       |       | 6250/0.13 |       |       |
|                                           |                 | Temp (F) Air Entering Evaporator — Ewb    |       |       |           |       |       |           |       |       |           |       |       |
|                                           |                 | 72                                        | 67    | 62    | 72        | 67    | 62    | 72        | 67    | 62    | 72        | 67    | 62    |
| 75                                        | TC<br>SHC<br>kW | 167.1                                     | 154.3 | 142.0 | 169.8     | 157.7 | 144.8 | 173.5     | 160.6 | 148.4 | 176.5     | 164.5 | 153.3 |
|                                           |                 | 82.5                                      | 103.5 | 123.6 | 85.8      | 109.7 | 132.0 | 90.3      | 117.7 | 141.9 | 98.2      | 130.7 | 153.1 |
|                                           |                 | 9.44                                      | 9.18  | 8.95  | 9.50      | 9.26  | 9.01  | 9.60      | 9.33  | 9.07  | 9.68      | 9.43  | 9.17  |
| 85                                        | TC<br>SHC<br>kW | 162.3                                     | 149.3 | 135.6 | 165.1     | 152.5 | 139.6 | 168.8     | 155.3 | 143.5 | 172.1     | 159.2 | 149.3 |
|                                           |                 | 80.9                                      | 101.4 | 120.9 | 84.4      | 107.9 | 129.9 | 89.6      | 115.8 | 139.8 | 97.6      | 129.3 | 149.1 |
|                                           |                 | 10.49                                     | 10.18 | 9.97  | 10.55     | 10.27 | 10.02 | 10.67     | 10.32 | 10.11 | 10.75     | 10.43 | 10.21 |
| 95                                        | TC<br>SHC<br>kW | 156.5                                     | 143.7 | 126.3 | 159.6     | 146.8 | 131.3 | 162.3     | 149.8 | 136.5 | 166.5     | 153.2 | 144.5 |
|                                           |                 | 79.1                                      | 99.5  | 116.5 | 83.0      | 106.1 | 126.0 | 87.6      | 114.2 | 135.8 | 95.8      | 127.7 | 144.4 |
|                                           |                 | 11.60                                     | 11.30 | 11.01 | 11.69     | 11.39 | 11.10 | 11.75     | 11.47 | 11.20 | 11.87     | 11.56 | 11.35 |
| 105                                       | TC<br>SHC<br>kW | 150.0                                     | 136.2 | 115.7 | 153.0     | 139.3 | 120.9 | 155.6     | 142.5 | 128.5 | 158.8     | 145.9 | 138.8 |
|                                           |                 | 76.5                                      | 96.7  | 111.2 | 80.8      | 103.5 | 120.0 | 85.7      | 112.3 | 128.4 | 93.6      | 125.9 | 138.7 |
|                                           |                 | 12.76                                     | 12.42 | 12.09 | 12.83     | 12.52 | 12.20 | 12.91     | 12.62 | 12.32 | 12.96     | 12.72 | 12.52 |
| 115                                       | TC<br>SHC<br>kW | 141.8                                     | 122.2 | 104.4 | 144.3     | 126.1 | 110.8 | 147.7     | 129.4 | 118.9 | 150.7     | 135.2 | 130.1 |
|                                           |                 | 73.6                                      | 91.2  | 104.2 | 77.9      | 98.5  | 110.8 | 83.4      | 107.3 | 118.4 | 91.8      | 121.9 | 129.9 |
|                                           |                 | 13.85                                     | 13.55 | 13.22 | 13.94     | 13.64 | 13.35 | 14.05     | 13.73 | 13.50 | 14.14     | 13.86 | 13.70 |
| 125                                       | TC<br>SHC<br>kW | 132.5                                     | 108.6 | 93.9  | 134.8     | 111.4 | 100.7 | 137.6     | 114.4 | 106.6 | 140.3     | 122.9 | 120.1 |
|                                           |                 | 70.9                                      | 85.7  | 93.8  | 74.9      | 92.9  | 100.7 | 80.2      | 101.4 | 106.5 | 89.0      | 116.3 | 120.1 |
|                                           |                 | 15.04                                     | 14.66 | 14.44 | 15.14     | 14.75 | 14.55 | 15.23     | 14.85 | 14.72 | 15.29     | 14.94 | 14.84 |

Do not operate at these conditions.

**LEGEND**

**BF** — Bypass Factor  
**Edb** — Entering Dry Bulb  
**Ewb** — Entering Wet Bulb  
**kW** — Compressor Motor Power Input  
**SHC** — Sensible Heat Capacity (1000 Btuh) Gross  
**TC** — Total Capacity (1000 Btuh) Gross

**NOTES:**

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:  

$$t_{ldb} = t_{edb} - \frac{\text{sensible heat capacity (Btuh)}}{1.1 \times \text{cfm}}$$

$$t_{lwb} = \text{wet-bulb temperature corresponding to enthalpy of air leaving indoor coil (} h_{lwb} \text{)}$$

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

where  $h_{ewb}$  = enthalpy of air entering indoor coil
- The SHC is based on 80 F edb temperature of air entering evaporator coil.  
 Below 80 F db, subtract (corr factor x cfm) from SHC.  
 Above 80 F db, add (corr factor x cfm) to SHC.  
 Correction Factor =  $1.10 \times (1 - BF) \times (db - 80)$

# PERFORMANCE DATA (cont)

## COOLING CAPACITIES, UNITS WITH PERFECT HUMIDITY™ OPTION

| 551B036 (3 TONS)                          |     |                                           |      |      |      |           |      |      |      |           |      |      |      |
|-------------------------------------------|-----|-------------------------------------------|------|------|------|-----------|------|------|------|-----------|------|------|------|
| TEMP (F)<br>AIR ENT<br>CONDENSER<br>(Edb) |     | Temp (F) Air Entering Evaporator — CFM/BF |      |      |      |           |      |      |      |           |      |      |      |
|                                           |     | 900/0.14                                  |      |      |      | 1200/0.17 |      |      |      | 1500/0.20 |      |      |      |
|                                           |     | Temp (F) Air Entering Evaporator — Ewb    |      |      |      |           |      |      |      |           |      |      |      |
|                                           |     | 78                                        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   |
| 75                                        | TC  | 44.9                                      | 41.3 | 37.3 | 34.3 | 46.8      | 43.5 | 39.2 | 35.9 | 48.8      | 45.5 | 41.6 | 38.3 |
|                                           | SHC | 12.5                                      | 17.5 | 22.4 | 26.7 | 13.2      | 19.6 | 25.5 | 31.2 | 13.7      | 21.5 | 28.5 | 35.2 |
|                                           | kW  | 2.26                                      | 2.19 | 2.14 | 2.10 | 2.28      | 2.21 | 2.16 | 2.14 | 2.31      | 2.24 | 2.19 | 2.16 |
| 85                                        | TC  | 42.1                                      | 38.6 | 34.4 | 31.6 | 44.8      | 41.3 | 37.5 | 33.3 | 47.0      | 43.5 | 38.6 | 35.5 |
|                                           | SHC | 10.8                                      | 15.2 | 20.1 | 25.1 | 11.4      | 17.1 | 23.3 | 29.0 | 12.0      | 18.9 | 26.3 | 32.9 |
|                                           | kW  | 2.53                                      | 2.46 | 2.40 | 2.37 | 2.55      | 2.47 | 2.43 | 2.40 | 2.58      | 2.51 | 2.45 | 2.42 |
| 95                                        | TC  | 39.2                                      | 35.9 | 31.4 | 28.8 | 44.6      | 39.2 | 35.9 | 30.6 | 47.0      | 41.3 | 35.7 | 32.9 |
|                                           | SHC | 9.1                                       | 13.0 | 17.9 | 23.3 | 14.0      | 14.5 | 21.1 | 26.9 | 14.8      | 16.1 | 24.2 | 30.6 |
|                                           | kW  | 2.82                                      | 2.74 | 2.68 | 2.63 | 2.83      | 2.76 | 2.74 | 2.67 | 2.54      | 2.80 | 2.75 | 2.71 |
| 105                                       | TC  | 37.1                                      | 33.8 | 29.7 | 27.4 |           | 36.3 | 32.2 | 28.7 |           | 38.1 | 32.8 | 30.4 |
|                                           | SHC | 7.5                                       | 10.9 | 15.8 | 21.0 |           | 12.5 | 18.9 | 24.6 |           | 14.0 | 21.7 | 28.1 |
|                                           | kW  | 3.13                                      | 3.05 | 3.00 | 2.97 |           | 3.09 | 3.04 | 2.99 |           | 3.12 | 3.07 | 3.03 |
| 115                                       | TC  |                                           | 31.8 | 28.0 | 25.5 |           | 33.2 | 28.7 | 26.5 |           | 34.9 | 30.0 | 27.9 |
|                                           | SHC |                                           | 9.0  | 13.7 | 18.4 |           | 10.3 | 16.8 | 22.3 |           | 11.2 | 19.3 | 25.2 |
|                                           | kW  |                                           | 3.40 | 3.36 | 3.31 |           | 3.45 | 3.38 | 3.32 |           | 3.48 | 3.41 | 3.37 |
| 125                                       | TC  |                                           | 28.7 | 26.3 | 23.4 |           | 29.7 | 25.5 | 22.9 |           | 31.3 | 27.1 | 25.5 |
|                                           | SHC |                                           | 6.9  | 12.2 | 17.3 |           | 7.9  | 14.5 | 20.6 |           | 9.2  | 17.3 | 22.3 |
|                                           | kW  |                                           | 3.78 | 3.73 | 3.66 |           | 3.84 | 3.77 | 3.71 |           | 3.87 | 3.79 | 3.75 |

| 551B048 (4 TONS)                          |                 |                                           |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|-------------------------------------------|-----------------|-------------------------------------------|------|------|------|-----------|------|------|------|-----------|------|------|------|-----------|------|------|------|
| TEMP (F)<br>AIR ENT<br>CONDENSER<br>(Edb) |                 | Temp (F) Air Entering Evaporator — CFM/BF |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |                 | 1200/0.17                                 |      |      |      | 1450/0.19 |      |      |      | 1600/0.21 |      |      |      | 2000/0.24 |      |      |      |
|                                           |                 | Temp (F) Air Entering Evaporator — Ewb    |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |                 | 78                                        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   |
| 75                                        | TC<br>SHC<br>kW | 57.5                                      | 52.9 | 47.5 | 41.5 | 59.4      | 55.7 | 50.9 | 47.5 | 60.5      | 57.0 | 51.7 | 48.1 | 64.1      | 60.5 | 55.6 | 52.1 |
|                                           |                 | 15.9                                      | 22.7 | 28.4 | 33.4 | 17.6      | 26.1 | 34.1 | 38.9 | 17.2      | 25.9 | 33.7 | 41.6 | 18.7      | 29.4 | 39.1 | 47.5 |
|                                           |                 | 2.93                                      | 2.87 | 2.86 | 2.82 | 2.94      | 2.89 | 2.87 | 2.84 | 2.94      | 2.89 | 2.86 | 2.85 | 2.96      | 2.90 | 2.88 | 2.85 |
| 85                                        | TC<br>SHC<br>kW | 53.1                                      | 49.2 | 43.8 | 37.1 | 55.2      | 52.1 | 47.2 | 43.6 | 56.4      | 52.9 | 47.9 | 43.7 | 59.5      | 55.4 | 51.4 | 47.0 |
|                                           |                 | 13.8                                      | 19.8 | 25.5 | 30.4 | 14.8      | 22.2 | 29.5 | 35.8 | 14.9      | 22.5 | 30.9 | 38.8 | 15.7      | 24.2 | 36.0 | 44.3 |
|                                           |                 | 3.35                                      | 3.26 | 3.25 | 3.21 | 3.36      | 3.28 | 3.26 | 3.23 | 3.37      | 3.28 | 3.26 | 3.24 | 3.39      | 3.28 | 3.26 | 3.24 |
| 95                                        | TC<br>SHC<br>kW | 49.0                                      | 45.8 | 40.1 | 32.8 | 51.0      | 48.2 | 43.6 | 39.4 | 52.3      | 48.8 | 44.0 | 39.3 | 55.2      | 51.7 | 47.4 | 43.0 |
|                                           |                 | 11.7                                      | 17.2 | 22.5 | 27.3 | 12.2      | 18.4 | 24.8 | 32.6 | 12.5      | 19.0 | 28.1 | 35.9 | 12.8      | 20.7 | 33.0 | 41.0 |
|                                           |                 | 3.77                                      | 3.71 | 3.68 | 3.64 | 3.78      | 3.72 | 3.69 | 3.67 | 3.80      | 3.72 | 3.69 | 3.67 | 3.82      | 3.74 | 3.70 | 3.68 |
| 105                                       | TC<br>SHC<br>kW | 44.4                                      | 41.6 | 37.0 | 29.7 | 45.7      | 43.2 | 38.9 | 35.4 | 47.1      | 43.9 | 39.7 | 34.7 | 49.3      | 46.5 | 41.4 | 37.5 |
|                                           |                 | 9.0                                       | 13.5 | 19.5 | 23.9 | 9.6       | 14.7 | 21.7 | 29.2 | 9.8       | 15.1 | 23.9 | 30.7 | 10.0      | 16.4 | 27.8 | 35.1 |
|                                           |                 | 4.29                                      | 4.20 | 4.17 | 4.11 | 4.29      | 4.20 | 4.17 | 4.14 | 4.31      | 4.20 | 4.17 | 4.15 | 4.32      | 4.22 | 4.19 | 4.16 |
| 115                                       | TC<br>SHC<br>kW | 40.0                                      | 37.2 | 33.2 | 27.1 | 40.6      | 38.4 | 34.0 | 30.8 | 42.1      | 39.4 | 35.5 | 30.0 | 43.8      | 41.3 | 35.2 | 31.9 |
|                                           |                 | 6.5                                       | 9.9  | 16.4 | 20.7 | 7.2       | 11.3 | 18.5 | 25.6 | 7.0       | 11.2 | 19.7 | 25.4 | 7.4       | 12.4 | 22.4 | 28.6 |
|                                           |                 | 4.80                                      | 4.73 | 4.68 | 4.62 | 4.80      | 4.74 | 4.71 | 4.64 | 4.82      | 4.73 | 4.72 | 4.65 | 4.82      | 4.74 | 4.72 | 4.69 |
| 125                                       | TC<br>SHC<br>kW | 35.1                                      | 32.4 | 28.1 | 24.9 |           | 33.8 | 28.1 | 27.4 |           | 35.3 | 30.5 | 26.6 |           | 36.1 | 32.0 | 28.7 |
|                                           |                 | 4.8                                       | 7.2  | 12.9 | 18.3 |           | 8.4  | 14.5 | 21.9 |           | 16.8 | 21.1 | 21.2 |           | 9.5  | 18.3 | 24.1 |
|                                           |                 | 5.36                                      | 5.29 | 5.23 | 5.15 |           | 5.30 | 5.25 | 5.19 |           | 5.29 | 5.27 | 5.21 |           | 5.30 | 5.29 | 5.25 |

Do not operate at these conditions.

### LEGEND

**BF** — Bypass Factor  
**Edb** — Entering Dry Bulb  
**Ewb** — Entering Wet Bulb  
**kW** — Compressor Motor Power Input  
**SHC** — Sensible Heat Capacity (1000 Btuh) Gross  
**TC** — Total Capacity (1000 Btuh) Gross

### NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible heat capacity (Btuh)}}{1.1 \times \text{cfm}}$$

$$t_{lwb} = \text{wet-bulb temperature corresponding to enthalpy of air leaving indoor coil (} h_{lwb} \text{)}$$

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

where  $h_{ewb}$  = enthalpy of air entering indoor coil

3. The SHC is based on 80 F edb temperature of air entering evaporator coil.

Below 80 F db, subtract (corr factor x cfm) from SHC.

Above 80 F db, add (corr factor x cfm) to SHC.

Correction Factor =  $1.10 \times (1 - \text{BF}) \times (\text{db} - 80)$

# PERFORMANCE DATA (cont)

## COOLING CAPACITIES, UNITS WITH PERFECT HUMIDITY™ OPTION (cont)

| 551B060 (5 TONS)                          |     |                                           |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|-------------------------------------------|-----|-------------------------------------------|------|------|------|-----------|------|------|------|-----------|------|------|------|-----------|------|------|------|
| TEMP (F)<br>AIR ENT<br>CONDENSER<br>(Edb) |     | Temp (F) Air Entering Evaporator — CFM/BF |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |     | 1500/0.08                                 |      |      |      | 1750/0.09 |      |      |      | 2000/0.11 |      |      |      | 2500/0.13 |      |      |      |
|                                           |     | Temp (F) Air Entering Evaporator — Ewb    |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |     | 78                                        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   |
| 75                                        | TC  | 79.4                                      | 69.9 | 62.7 | 56.2 | 85.0      | 74.7 | 67.3 | 61.0 | 90.0      | 78.5 | 71.2 | 64.8 |           | 81.7 | 75.5 | 69.3 |
|                                           | SHC | 21.8                                      | 29.0 | 36.9 | 43.9 | 23.2      | 31.7 | 40.5 | 51.2 | 24.7      | 34.5 | 44.2 | 55.4 |           | 37.8 | 52.0 | 62.8 |
|                                           | kW  | 3.77                                      | 3.61 | 3.55 | 3.51 | 3.81      | 3.64 | 3.58 | 3.49 | 3.84      | 3.65 | 3.60 | 3.51 |           | 3.62 | 3.58 | 3.51 |
| 85                                        | TC  | 75.1                                      | 65.9 | 59.1 | 51.7 |           | 70.6 | 63.2 | 56.3 |           | 75.5 | 66.8 | 60.7 |           | 78.1 | 70.8 | 65.1 |
|                                           | SHC | 18.9                                      | 25.3 | 34.0 | 41.9 |           | 27.5 | 37.6 | 48.0 |           | 30.7 | 41.6 | 52.0 |           | 33.8 | 47.4 | 58.0 |
|                                           | kW  | 4.31                                      | 4.05 | 3.97 | 3.91 |           | 4.07 | 4.01 | 3.92 |           | 4.11 | 4.00 | 3.95 |           | 4.08 | 4.02 | 3.96 |
| 95                                        | TC  | 75.6                                      | 61.9 | 55.2 | 47.7 |           | 66.5 | 58.8 | 51.3 |           | 70.4 | 61.9 | 55.7 |           | 74.2 | 65.9 | 60.6 |
|                                           | SHC | 24.1                                      | 21.6 | 31.1 | 40.0 |           | 23.5 | 34.5 | 44.6 |           | 26.0 | 38.6 | 47.9 |           | 30.0 | 42.8 | 52.6 |
|                                           | kW  | 4.62                                      | 4.53 | 4.43 | 4.35 |           | 4.55 | 4.47 | 4.37 |           | 4.56 | 4.42 | 4.41 |           | 4.58 | 4.49 | 4.44 |
| 105                                       | TC  |                                           | 57.7 | 51.1 | 44.9 |           | 61.8 | 54.5 | 47.7 |           | 65.1 | 57.2 | 50.8 |           | 68.4 | 60.3 | 56.1 |
|                                           | SHC |                                           | 18.1 | 27.8 | 35.7 |           | 20.0 | 31.2 | 40.1 |           | 22.1 | 34.3 | 43.5 |           | 26.1 | 38.9 | 48.5 |
|                                           | kW  |                                           | 5.05 | 4.93 | 4.84 |           | 5.09 | 4.97 | 4.88 |           | 5.11 | 4.96 | 4.92 |           | 5.11 | 5.03 | 4.98 |
| 115                                       | TC  |                                           | 53.4 | 47.2 | 42.0 |           | 56.6 | 50.0 | 44.2 |           | 59.6 | 52.5 | 46.2 |           | 62.6 | 54.9 | 51.6 |
|                                           | SHC |                                           | 14.7 | 24.6 | 31.5 |           | 16.5 | 27.8 | 35.7 |           | 18.2 | 30.0 | 39.0 |           | 22.1 | 34.9 | 44.3 |
|                                           | kW  |                                           | 5.60 | 5.49 | 5.40 |           | 5.64 | 5.52 | 5.45 |           | 5.69 | 5.55 | 5.48 |           | 5.69 | 5.61 | 5.57 |
| 125                                       | TC  |                                           | 48.7 | 42.0 | 36.9 |           | 51.3 | 45.0 | 39.0 |           | 54.1 | 46.8 | 40.9 |           | 56.9 | 49.2 | 45.9 |
|                                           | SHC |                                           | 10.9 | 19.6 | 28.0 |           | 12.5 | 22.2 | 31.5 |           | 13.5 | 24.0 | 34.0 |           | 16.5 | 28.0 | 38.8 |
|                                           | kW  |                                           | 6.26 | 6.12 | 6.02 |           | 6.28 | 6.18 | 6.09 |           | 6.33 | 6.18 | 6.13 |           | 6.33 | 6.27 | 6.22 |

| 551B072 (6 TONS)                          |                 |                                           |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|-------------------------------------------|-----------------|-------------------------------------------|------|------|------|-----------|------|------|------|-----------|------|------|------|-----------|------|------|------|
| TEMP (F)<br>AIR ENT<br>CONDENSER<br>(Edb) |                 | Temp (F) Air Entering Evaporator — CFM/BF |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |                 | 1800/0.05                                 |      |      |      | 2100/0.06 |      |      |      | 2400/0.06 |      |      |      | 3000/0.08 |      |      |      |
|                                           |                 | Temp (F) Air Entering Evaporator — Ewb    |      |      |      |           |      |      |      |           |      |      |      |           |      |      |      |
|                                           |                 | 78                                        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   | 78        | 72   | 67   | 62   |
| 75                                        | TC<br>SHC<br>kW | 89.0                                      | 82.6 | 75.6 | 68.5 | 91.1      | 84.9 | 78.0 | 70.9 | 92.4      | 85.9 | 79.5 | 73.5 |           | 89.1 | 82.7 | 77.0 |
|                                           |                 | 25.0                                      | 36.0 | 44.8 | 55.4 | 25.1      | 37.5 | 49.1 | 59.7 | 25.2      | 38.8 | 51.1 | 64.0 |           | 41.8 | 58.1 | 70.2 |
|                                           |                 | 4.80                                      | 4.60 | 4.52 | 4.36 | 4.86      | 4.67 | 4.57 | 4.46 | 4.89      | 4.70 | 4.57 | 4.45 |           | 4.77 | 4.61 | 4.51 |
| 85                                        | TC<br>SHC<br>kW | 84.9                                      | 78.2 | 71.6 | 64.5 | 87.0      | 80.9 | 73.4 | 65.8 |           | 82.0 | 74.4 | 67.9 |           | 85.8 | 78.2 | 72.3 |
|                                           |                 | 21.8                                      | 31.4 | 41.2 | 41.7 | 21.9      | 33.0 | 44.7 | 55.8 |           | 34.7 | 47.4 | 60.1 |           | 37.6 | 54.3 | 66.7 |
|                                           |                 | 5.40                                      | 5.16 | 5.03 | 4.89 | 5.46      | 5.22 | 5.11 | 4.96 |           | 5.26 | 5.09 | 4.97 |           | 5.32 | 5.17 | 5.04 |
| 95                                        | TC<br>SHC<br>kW | 80.7                                      | 73.8 | 67.4 | 60.2 |           | 76.3 | 68.3 | 60.5 |           | 77.5 | 69.3 | 62.3 |           | 82.0 | 72.8 | 67.5 |
|                                           |                 | 18.7                                      | 27.0 | 37.6 | 47.9 |           | 28.2 | 40.1 | 51.6 |           | 30.2 | 43.7 | 56.2 |           | 33.6 | 49.2 | 62.9 |
|                                           |                 | 6.01                                      | 5.75 | 5.60 | 5.44 |           | 5.80 | 5.66 | 5.48 |           | 5.84 | 5.68 | 5.53 |           | 5.90 | 5.73 | 5.60 |
| 105                                       | TC<br>SHC<br>kW |                                           | 68.4 | 62.6 | 55.9 |           | 71.4 | 64.3 | 56.2 |           | 72.1 | 64.6 | 58.3 |           | 75.7 | 67.0 | 62.4 |
|                                           |                 |                                           | 22.3 | 33.5 | 43.5 |           | 23.4 | 36.5 | 48.0 |           | 25.4 | 38.4 | 50.2 |           | 29.1 | 45.2 | 56.2 |
|                                           |                 |                                           | 6.37 | 6.22 | 6.06 |           | 6.45 | 6.27 | 6.10 |           | 6.46 | 6.29 | 6.16 |           | 6.53 | 6.36 | 6.24 |
| 115                                       | TC<br>SHC<br>kW |                                           | 63.4 | 57.8 | 50.7 |           | 66.0 | 60.1 | 51.5 |           | 66.4 | 59.6 | 54.5 |           | 68.8 | 60.8 | 57.5 |
|                                           |                 |                                           | 18.1 | 29.5 | 38.9 |           | 18.8 | 32.9 | 44.1 |           | 20.7 | 33.3 | 43.8 |           | 24.3 | 41.4 | 49.7 |
|                                           |                 |                                           | 7.04 | 6.89 | 6.68 |           | 7.10 | 6.91 | 6.74 |           | 7.12 | 6.95 | 6.83 |           | 7.16 | 7.01 | 6.92 |
| 125                                       | TC<br>SHC<br>kW |                                           | 55.5 | 49.6 | 45.8 |           | 58.4 | 52.4 | 46.1 |           | 57.6 | 52.1 | 49.5 |           | 59.2 | 52.8 | 53.1 |
|                                           |                 |                                           | 15.3 | 24.0 | 35.2 |           | 15.7 | 27.5 | 39.0 |           | 17.5 | 27.5 | 38.4 |           | 20.9 | 34.6 | 44.4 |
|                                           |                 |                                           | 7.80 | 7.61 | 7.38 |           | 7.83 | 7.67 | 7.49 |           | 7.89 | 7.72 | 7.58 |           | 7.92 | 7.78 | 7.70 |

Do not operate at these conditions.

### LEGEND

**BF** — Bypass Factor  
**Edb** — Entering Dry Bulb  
**Ewb** — Entering Wet Bulb  
**kW** — Compressor Motor Power Input  
**SHC** — Sensible Heat Capacity (1000 Btuh) Gross  
**TC** — Total Capacity (1000 Btuh) Gross

### NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible heat capacity (Btuh)}}{1.1 \times \text{cfm}}$$

$$t_{lwb} = \text{wet-bulb temperature corresponding to enthalpy of air leaving indoor coil (} h_{lwb} \text{)}$$

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

where  $h_{ewb}$  = enthalpy of air entering indoor coil

3. The SHC is based on 80 F edb temperature of air entering evaporator coil.  
 Below 80 F db, subtract (corr factor x cfm) from SHC.  
 Above 80 F db, add (corr factor x cfm) to SHC.  
 Correction Factor =  $1.10 \times (1 - \text{BF}) \times (\text{db} - 80)$

# PERFORMANCE DATA (cont)

## COOLING CAPACITIES, UNITS WITH PERFECT HUMIDITY™ OPTION (cont)

| 551B090 (7½ TONS)                         |     |                                           |      |      |      |            |       |      |      |            |       |       |      |
|-------------------------------------------|-----|-------------------------------------------|------|------|------|------------|-------|------|------|------------|-------|-------|------|
| TEMP (F)<br>AIR ENT<br>CONDENSER<br>(Edb) |     | Temp (F) Air Entering Evaporator — CFM/BF |      |      |      |            |       |      |      |            |       |       |      |
|                                           |     | 2250/0.095                                |      |      |      | 3000/0.110 |       |      |      | 3750/0.135 |       |       |      |
|                                           |     | Temp (F) Air Entering Evaporator — Ewb    |      |      |      |            |       |      |      |            |       |       |      |
|                                           |     | 78                                        | 72   | 67   | 62   | 78         | 72    | 67   | 62   | 78         | 72    | 67    | 62   |
| 75                                        | TC  | 104.4                                     | 98.4 | 91.1 | 81.1 | 109.5      | 103.7 | 97.9 | 91.8 | 110.0      | 105.8 | 101.3 | 94.1 |
|                                           | SHC | 31.1                                      | 44.5 | 55.4 | 67.0 | 34.0       | 50.4  | 65.4 | 80.5 | 36.5       | 54.5  | 72.4  | 89.5 |
|                                           | kW  | 5.10                                      | 5.05 | 4.96 | 4.87 | 5.40       | 5.09  | 5.04 | 4.97 | 5.69       | 5.16  | 5.04  | 4.99 |
| 85                                        | TC  | 99.9                                      | 94.2 | 85.8 | 76.9 | 106.8      | 100.3 | 92.4 | 85.2 | 109.6      | 103.5 | 96.8  | 89.0 |
|                                           | SHC | 27.4                                      | 39.7 | 51.3 | 62.7 | 30.9       | 46.2  | 58.3 | 75.7 | 31.5       | 50.6  | 68.2  | 84.3 |
|                                           | kw  | 5.79                                      | 5.74 | 5.65 | 5.55 | 6.12       | 5.81  | 5.75 | 5.64 | 6.45       | 5.89  | 5.74  | 5.70 |
| 95                                        | TC  | 97.6                                      | 89.9 | 80.5 | 72.6 | 104.2      | 96.9  | 86.8 | 78.6 | 107.9      | 101.1 | 92.2  | 83.8 |
|                                           | SHC | 24.4                                      | 34.8 | 47.2 | 58.3 | 27.7       | 41.9  | 51.2 | 71.0 | 28.9       | 46.6  | 63.9  | 79.1 |
|                                           | kW  | 6.53                                      | 6.42 | 6.33 | 6.22 | 6.83       | 6.52  | 6.45 | 6.31 | 7.17       | 6.62  | 6.43  | 6.40 |
| 105                                       | TC  | 91.7                                      | 84.6 | 75.3 | 68.0 |            | 91.6  | 81.3 | 73.4 |            | 94.5  | 86.3  | 78.4 |
|                                           | SHC | 20.7                                      | 30.0 | 42.5 | 53.9 |            | 36.9  | 49.3 | 66.4 |            | 41.4  | 59.2  | 73.8 |
|                                           | kW  | 7.34                                      | 7.26 | 7.16 | 7.05 |            | 7.36  | 7.25 | 7.15 |            | 7.46  | 7.29  | 7.23 |
| 115                                       | TC  |                                           | 79.2 | 70.1 | 63.3 |            | 86.2  | 75.8 | 68.1 |            | 87.9  | 80.3  | 72.9 |
|                                           | SHC |                                           | 25.2 | 37.8 | 49.4 |            | 31.9  | 47.4 | 61.9 |            | 36.1  | 54.4  | 68.5 |
|                                           | kW  |                                           | 8.10 | 7.99 | 7.87 |            | 8.20  | 8.05 | 7.98 |            | 8.30  | 8.14  | 8.05 |
| 125                                       | TC  |                                           | 72.8 | 64.5 | 57.2 |            | 78.0  | 69.8 | 62.3 |            | 81.6  | 73.2  | 69.2 |
|                                           | SHC |                                           | 20.1 | 33.4 | 44.1 |            | 25.4  | 42.5 | 56.5 |            | 31.1  | 48.9  | 64.7 |
|                                           | kW  |                                           | 9.10 | 8.94 | 8.83 |            | 9.23  | 9.05 | 8.95 |            | 9.26  | 9.10  | 8.99 |

| 551B102 (8½ TONS)                         |                 |                                           |       |       |       |           |       |       |       |            |       |       |       |            |       |       |       |
|-------------------------------------------|-----------------|-------------------------------------------|-------|-------|-------|-----------|-------|-------|-------|------------|-------|-------|-------|------------|-------|-------|-------|
| TEMP (F)<br>AIR ENT<br>CONDENSER<br>(Edb) |                 | Temp (F) Air Entering Evaporator — CFM/BF |       |       |       |           |       |       |       |            |       |       |       |            |       |       |       |
|                                           |                 | 2550/0.075                                |       |       |       | 3000/0.09 |       |       |       | 3400/0.105 |       |       |       | 4250/0.125 |       |       |       |
|                                           |                 | Temp (F) Air Entering Evaporator — Ewb    |       |       |       |           |       |       |       |            |       |       |       |            |       |       |       |
|                                           |                 | 78                                        | 72    | 67    | 62    | 78        | 72    | 67    | 62    | 78         | 72    | 67    | 62    | 78         | 72    | 67    | 62    |
| 75                                        | TC<br>SHC<br>kW | 120.5                                     | 112.4 | 102.2 | 92.6  | 121.5     | 115.2 | 106.4 | 96.4  | 124.9      | 119.6 | 110.3 | 101.3 | 132.7      | 127.6 | 117.6 | 108.0 |
|                                           |                 | 32.5                                      | 49.1  | 62.4  | 75.0  | 33.2      | 52.9  | 68.5  | 82.3  | 34.2       | 56.2  | 73.3  | 89.5  | 38.0       | 62.8  | 83.3  | 101.7 |
|                                           |                 | 6.16                                      | 6.10  | 5.96  | 5.86  | 6.41      | 6.18  | 6.05  | 5.95  | 6.53       | 6.18  | 6.05  | 5.95  | 6.83       | 6.18  | 6.10  | 6.00  |
| 85                                        | TC<br>SHC<br>kW | 114.2                                     | 105.7 | 95.7  | 86.5  | 116.7     | 110.0 | 100.6 | 91.0  | 120.3      | 114.0 | 103.7 | 94.6  | 124.0      | 120.3 | 110.9 | 101.2 |
|                                           |                 | 28.8                                      | 43.6  | 57.1  | 69.9  | 29.9      | 47.8  | 62.8  | 76.9  | 30.4       | 50.7  | 67.9  | 82.8  | 44.8       | 58.5  | 77.7  | 98.4  |
|                                           |                 | 6.99                                      | 6.92  | 6.78  | 6.63  | 7.20      | 6.97  | 6.90  | 6.75  | 7.37       | 7.01  | 6.85  | 6.75  | 7.68       | 7.01  | 6.91  | 6.80  |
| 95                                        | TC<br>SHC<br>kW | 108.0                                     | 98.9  | 89.1  | 80.4  | 112.4     | 104.7 | 94.8  | 85.5  | 115.0      | 108.4 | 97.0  | 87.9  |            | 113.0 | 104.1 | 94.3  |
|                                           |                 | 25.1                                      | 38.0  | 51.7  | 64.8  | 26.8      | 42.7  | 57.0  | 71.4  | 27.2       | 45.2  | 62.4  | 76.2  |            | 54.3  | 72.0  | 87.9  |
|                                           |                 | 7.85                                      | 7.73  | 7.59  | 7.40  | 8.03      | 7.75  | 7.75  | 7.56  | 8.21       | 7.84  | 7.65  | 7.54  |            | 7.84  | 7.71  | 7.60  |
| 105                                       | TC<br>SHC<br>kW | 100.2                                     | 91.8  | 82.3  | 73.8  |           | 97.3  | 87.6  | 78.6  |            | 100.4 | 89.8  | 80.8  |            | 105.1 | 95.3  | 85.8  |
|                                           |                 | 20.9                                      | 32.6  | 46.3  | 59.5  |           | 37.0  | 51.9  | 66.8  |            | 39.3  | 56.7  | 70.0  |            | 47.1  | 65.5  | 80.9  |
|                                           |                 | 8.91                                      | 8.80  | 8.64  | 8.47  |           | 8.80  | 8.76  | 8.58  |            | 8.89  | 8.69  | 8.59  |            | 8.93  | 8.77  | 8.67  |
| 115                                       | TC<br>SHC<br>kW |                                           | 84.7  | 75.5  | 67.3  |           | 89.8  | 80.5  | 71.7  |            | 82.5  | 82.5  | 73.8  |            | 97.2  | 86.6  | 77.9  |
|                                           |                 |                                           | 27.2  | 40.9  | 54.2  |           | 31.4  | 46.9  | 62.2  |            | 33.4  | 51.0  | 63.8  |            | 39.9  | 59.1  | 73.4  |
|                                           |                 |                                           | 9.86  | 9.69  | 9.53  |           | 9.86  | 9.77  | 9.61  |            | 9.95  | 9.74  | 9.65  |            | 10.01 | 9.84  | 9.75  |
| 125                                       | TC<br>SHC<br>kW |                                           | 77.6  | 68.7  | 60.7  |           | 82.4  | 73.3  | 64.8  |            | 84.5  | 75.3  | 66.7  |            | 89.3  | 77.8  | 68.9  |
|                                           |                 |                                           | 21.8  | 35.5  | 48.9  |           | 25.7  | 41.8  | 57.6  |            | 27.5  | 45.3  | 57.6  |            | 32.7  | 52.6  | 66.9  |
|                                           |                 |                                           | 10.93 | 10.74 | 10.60 |           | 10.91 | 10.78 | 10.64 |            | 11.00 | 10.78 | 10.70 |            | 11.10 | 10.90 | 10.82 |

Do not operate at these conditions.

### LEGEND

**BF** — Bypass Factor  
**Edb** — Entering Dry Bulb  
**Ewb** — Entering Wet Bulb  
**kW** — Compressor Motor Power Input  
**SHC** — Sensible Heat Capacity (1000 Btuh) Gross  
**TC** — Total Capacity (1000 Btuh) Gross

### NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible heat capacity (Btuh)}}{1.1 \times \text{cfm}}$$

$$t_{lwb} = \text{wet-bulb temperature corresponding to enthalpy of air leaving indoor coil (} h_{lwb} \text{)}$$

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

where  $h_{ewb}$  = enthalpy of air entering indoor coil

3. The SHC is based on 80 F edb temperature of air entering evaporator coil.  
 Below 80 F db, subtract (corr factor x cfm) from SHC.  
 Above 80 F db, add (corr factor x cfm) to SHC.  
 Correction Factor =  $1.10 \times (1 - BF) \times (db - 80)$

# PERFORMANCE DATA (cont)

## COOLING CAPACITIES, UNITS WITH PERFECT HUMIDITY™ OPTION (cont)

| 551B120 (10 TONS)                         |     |                                           |       |       |       |           |       |       |       |            |       |       |       |           |       |       |       |
|-------------------------------------------|-----|-------------------------------------------|-------|-------|-------|-----------|-------|-------|-------|------------|-------|-------|-------|-----------|-------|-------|-------|
| TEMP (F)<br>AIR ENT<br>CONDENSER<br>(Edb) |     | Temp (F) Air Entering Evaporator — CFM/BF |       |       |       |           |       |       |       |            |       |       |       |           |       |       |       |
|                                           |     | 3000/0.025                                |       |       |       | 3200/0.03 |       |       |       | 4000/0.035 |       |       |       | 5000/0.04 |       |       |       |
|                                           |     | Temp (F) Air Entering Evaporator — Ewb    |       |       |       |           |       |       |       |            |       |       |       |           |       |       |       |
|                                           |     | 78                                        | 72    | 67    | 62    | 78        | 72    | 67    | 62    | 78         | 72    | 67    | 62    | 78        | 72    | 67    | 62    |
| 75                                        | TC  | 146.2                                     | 134.3 | 122.5 | 111.4 | 147.2     | 135.8 | 124.3 | 113.0 | 147.6      | 138.4 | 129.5 | 123.5 | 153.6     | 143.3 | 136.5 | 130.2 |
|                                           | SHC | 42.7                                      | 60.0  | 76.1  | 93.7  | 43.5      | 61.3  | 79.1  | 97.4  | 47.5       | 68.0  | 89.5  | 109.4 | 49.2      | 75.2  | 100.9 | 123.3 |
|                                           | kW  | 7.09                                      | 7.03  | 6.84  | 6.72  | 7.25      | 7.01  | 6.89  | 6.77  | 7.42       | 7.10  | 6.92  | 6.77  | 7.79      | 7.15  | 7.03  | 6.88  |
| 85                                        | TC  | 139.5                                     | 127.6 | 115.4 | 104.6 | 140.5     | 128.9 | 118.1 | 107.0 |            | 132.5 | 121.5 | 116.6 |           | 137.2 | 128.0 | 122.9 |
|                                           | SHC | 35.4                                      | 51.5  | 68.8  | 87.2  | 36.5      | 53.9  | 72.0  | 91.2  |            | 61.0  | 82.7  | 102.4 |           | 68.6  | 93.6  | 115.9 |
|                                           | kW  | 8.03                                      | 7.96  | 7.86  | 7.59  | 8.20      | 7.94  | 7.78  | 7.51  |            | 8.02  | 7.84  | 7.69  |           | 8.02  | 7.94  | 7.79  |
| 95                                        | TC  | 133.5                                     | 120.9 | 108.3 | 97.8  |           | 121.9 | 111.8 | 101.0 |            | 126.5 | 113.4 | 109.7 |           | 131.1 | 119.4 | 115.5 |
|                                           | SHC | 29.5                                      | 43.0  | 61.5  | 80.6  |           | 46.5  | 64.8  | 84.9  |            | 53.9  | 75.9  | 95.4  |           | 62.0  | 86.2  | 108.4 |
|                                           | kW  | 8.97                                      | 8.88  | 8.87  | 8.46  |           | 8.86  | 8.66  | 8.26  |            | 8.94  | 8.76  | 8.60  |           | 8.89  | 8.85  | 8.69  |
| 105                                       | TC  |                                           | 112.0 | 99.9  | 90.4  |           | 113.1 | 103.2 | 93.4  |            | 117.2 | 105.0 | 100.7 |           | 122.1 | 110.5 | 105.9 |
|                                           | SHC |                                           | 36.1  | 54.1  | 73.8  |           | 38.8  | 57.8  | 78.9  |            | 45.6  | 68.2  | 86.8  |           | 53.0  | 78.3  | 99.7  |
|                                           | kW  |                                           | 10.04 | 9.96  | 9.62  |           | 10.03 | 9.82  | 9.48  |            | 10.12 | 9.93  | 9.82  |           | 10.10 | 10.00 | 9.90  |
| 115                                       | TC  |                                           | 103.0 | 91.5  | 83.1  |           | 104.3 | 94.6  | 85.9  |            | 107.8 | 96.7  | 91.7  |           | 113.0 | 101.6 | 96.4  |
|                                           | SHC |                                           | 29.2  | 46.7  | 66.9  |           | 31.2  | 50.7  | 72.9  |            | 37.3  | 60.6  | 78.3  |           | 44.0  | 70.3  | 90.9  |
|                                           | kW  |                                           | 11.19 | 11.06 | 10.78 |           | 11.21 | 10.97 | 10.70 |            | 11.30 | 11.10 | 11.03 |           | 11.30 | 11.20 | 11.10 |
| 125                                       | TC  |                                           | 94.1  | 83.1  | 75.7  |           | 95.5  | 86.0  | 78.3  |            | 98.5  | 88.3  | 82.7  |           | 104.0 | 92.7  | 86.8  |
|                                           | SHC |                                           | 22.3  | 39.3  | 60.1  |           | 23.5  | 43.7  | 66.8  |            | 29.0  | 52.8  | 69.7  |           | 35.0  | 62.4  | 82.2  |
|                                           | kW  |                                           | 12.35 | 12.15 | 11.94 |           | 12.38 | 12.13 | 11.92 |            | 12.48 | 12.27 | 12.25 |           | 12.53 | 12.30 | 12.28 |

| 551B150 (12½ TONS)                        |     |                                           |       |       |       |           |       |       |       |           |       |       |       |           |       |       |       |       |
|-------------------------------------------|-----|-------------------------------------------|-------|-------|-------|-----------|-------|-------|-------|-----------|-------|-------|-------|-----------|-------|-------|-------|-------|
| TEMP (F)<br>AIR ENT<br>CONDENSER<br>(Edb) |     | Temp (F) Air Entering Evaporator — CFM/BF |       |       |       |           |       |       |       |           |       |       |       |           |       |       |       |       |
|                                           |     | 3750/0.08                                 |       |       |       | 4300/0.09 |       |       |       | 5000/0.11 |       |       |       | 6250/0.13 |       |       |       |       |
|                                           |     | Temp (F) Air Entering Evaporator — Ewb    |       |       |       |           |       |       |       |           |       |       |       |           |       |       |       |       |
|                                           |     | 78                                        | 72    | 67    | 62    | 78        | 72    | 67    | 62    | 78        | 72    | 67    | 62    | 78        | 72    | 67    | 62    |       |
| 75                                        | TC  | 172.0                                     | 156.3 | 144.2 | 132.3 | 174.3     | 160.0 | 148.4 | 136.2 | 177.4     | 162.8 | 150.6 | 138.2 | 183.6     | 169.0 | 157.5 | 145.6 |       |
|                                           | SHC | 41.4                                      | 66.6  | 87.6  | 112.1 | 43.2      | 72.5  | 94.8  | 121.3 | 43.6      | 76.9  | 99.6  | 127.5 | 65.5      | 87.0  | 115.5 | 142.7 |       |
|                                           | kW  | 9.75                                      | 9.28  | 8.98  | 8.59  | 9.78      | 9.35  | 9.08  | 8.80  | 9.85      | 9.40  | 9.18  | 8.90  | 9.87      | 9.43  | 9.18  | 8.93  |       |
| 85                                        | TC  | 164.0                                     | 147.6 | 136.2 | 123.7 | 165.4     | 150.7 | 140.1 | 127.2 |           | 154.1 | 140.8 | 127.9 |           | 161.1 | 148.0 | 135.4 |       |
|                                           | SHC | 41.9                                      | 58.7  | 80.0  | 103.8 | 43.2      | 63.5  | 86.5  | 112.2 |           | 68.7  | 91.0  | 118.1 |           | 77.7  | 107.8 | 133.2 |       |
|                                           | kW  | 10.84                                     | 10.29 | 9.93  | 9.58  | 11.13     | 10.36 | 10.08 | 9.77  |           | 10.40 | 10.34 | 10.03 |           | 10.45 | 10.18 | 9.88  |       |
| 95                                        | TC  | 155.5                                     | 138.9 | 128.2 | 115.1 |           | 141.4 | 131.8 | 118.3 |           | 145.3 | 131.0 | 117.6 |           | 153.1 | 138.4 | 125.1 |       |
|                                           | SHC | 35.1                                      | 50.8  | 72.3  | 95.5  |           | 54.4  | 78.1  | 103.2 |           | 60.5  | 82.3  | 108.7 |           | 68.5  | 100.0 | 123.7 |       |
|                                           | kW  | 12.02                                     | 11.29 | 10.87 | 10.57 |           | 11.37 | 11.08 | 10.74 |           | 11.40 | 11.50 | 11.15 |           | 11.46 | 11.17 | 10.83 |       |
| 105                                       | TC  |                                           | 129.1 | 117.8 | 105.8 |           | 131.7 | 121.0 | 108.7 |           | 134.8 | 119.9 | 107.7 |           | 140.9 | 126.9 | 115.9 |       |
|                                           | SHC |                                           | 42.1  | 63.5  | 86.5  |           | 45.4  | 69.0  | 93.9  |           | 51.2  | 74.2  | 101.3 |           | 57.7  | 90.2  | 113.6 |       |
|                                           | kW  |                                           | 12.59 | 12.14 | 11.82 |           | 12.67 | 12.34 | 11.96 |           | 12.70 | 12.67 | 12.28 |           | 12.79 | 12.46 | 12.08 |       |
| 115                                       | TC  |                                           |       | 119.2 | 107.3 | 96.4      |       | 122.1 | 110.2 | 99.0      |       | 124.2 | 108.8 | 97.8      |       | 128.7 | 115.3 | 106.7 |
|                                           | SHC |                                           |       | 33.5  | 54.8  | 77.5      |       | 36.4  | 59.8  | 84.7      |       | 41.9  | 66.1  | 93.8      |       | 46.8  | 80.5  | 103.5 |
|                                           | kW  |                                           |       | 13.90 | 13.40 | 13.08     |       | 13.98 | 13.59 | 13.18     |       | 14.0  | 13.83 | 13.41     |       | 14.11 | 13.75 | 13.33 |
| 125                                       | TC  |                                           |       | 109.4 | 96.9  | 87.1      |       | 112.4 | 99.4  | 89.3      |       | 113.7 | 97.7  | 87.8      |       | 116.5 | 103.8 | 97.5  |
|                                           | SHC |                                           |       | 24.8  | 46.0  | 68.5      |       | 27.4  | 50.7  | 75.5      |       | 32.6  | 58.0  | 86.4      |       | 36.0  | 70.7  | 93.5  |
|                                           | kW  |                                           |       | 15.20 | 14.67 | 14.33     |       | 15.28 | 14.85 | 14.40     |       | 15.30 | 15.00 | 14.54     |       | 15.44 | 15.04 | 14.58 |

Do not operate at these conditions.

### LEGEND

**BF** — Bypass Factor  
**Edb** — Entering Dry Bulb  
**Ewb** — Entering Wet Bulb  
**kW** — Compressor Motor Power Input  
**SHC** — Sensible Heat Capacity (1000 Btuh) Gross  
**TC** — Total Capacity (1000 Btuh) Gross

### NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:
 
$$t_{ldb} = t_{edb} - \frac{\text{sensible heat capacity (Btuh)}}{1.1 \times \text{cfm}}$$

$$t_{lwb} = \text{wet-bulb temperature corresponding to enthalpy of air leaving indoor coil (} h_{lwb} \text{)}$$

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$
 where  $h_{ewb}$  = enthalpy of air entering indoor coil
- The SHC is based on 80 F edb temperature of air entering evaporator coil.  
 Below 80 F db, subtract (corr factor x cfm) from SHC.  
 Above 80 F db, add (corr factor x cfm) to SHC.  
 Correction Factor =  $1.10 \times (1 - \text{BF}) \times (\text{db} - 80)$

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — VERTICAL DISCHARGE UNITS

**551B036 (3 TONS) — STANDARD MOTOR (BELT DRIVE)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |     |      |     |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|-----|------|-----|------|------|------|------|------|------|------|
|                  | 0.1                               |      | 0.2 |      | 0.3 |      | 0.4  |      | 0.5  |      | 0.6  |      |
|                  | Rpm                               | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 900              | 581                               | 0.12 | 673 | 0.18 | 736 | 0.22 | 805  | 0.25 | 865  | 0.29 | 911  | 0.34 |
| 1000             | 644                               | 0.19 | 709 | 0.22 | 782 | 0.28 | 835  | 0.30 | 900  | 0.35 | 937  | 0.38 |
| 1100             | 687                               | 0.22 | 746 | 0.26 | 806 | 0.30 | 867  | 0.35 | 929  | 0.40 | 964  | 0.40 |
| 1200             | 733                               | 0.26 | 785 | 0.32 | 843 | 0.35 | 903  | 0.41 | 960  | 0.47 | 994  | 0.50 |
| 1300             | 754                               | 0.29 | 826 | 0.38 | 891 | 0.43 | 942  | 0.48 | 991  | 0.53 | 1047 | 0.60 |
| 1400             | 810                               | 0.35 | 868 | 0.45 | 937 | 0.51 | 984  | 0.57 | 1032 | 0.62 | 1067 | 0.67 |
| 1500             | 841                               | 0.42 | 911 | 0.53 | 985 | 0.61 | 1029 | 0.66 | 1073 | 0.72 | 1109 | 0.77 |

**551B036 (3 TONS) — STANDARD MOTOR (BELT DRIVE) (cont)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
|                  | 0.7                               |      | 0.8  |      | 0.9  |      | 1.0  |      | 1.1  |      | 1.2  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 900              | 957                               | 0.39 | 988  | 0.43 | 1039 | 0.45 | 1061 | 0.47 | 1083 | 0.53 | 1105 | 0.57 |
| 1000             | 992                               | 0.44 | 1039 | 0.49 | 1061 | 0.51 | 1086 | 0.55 | 1111 | 0.59 | 1136 | 0.63 |
| 1100             | 1013                              | 0.49 | 1068 | 0.55 | 1090 | 0.58 | 1109 | 0.61 | 1127 | 0.64 | 1145 | 0.67 |
| 1200             | 1045                              | 0.56 | 1090 | 0.64 | 1109 | 0.64 | 1156 | 0.68 | 1203 | 0.71 | 1250 | 0.74 |
| 1300             | 1075                              | 0.64 | 1122 | 0.70 | 1152 | 0.72 | 1190 | 0.76 | 1228 | 0.80 | 1266 | 0.84 |
| 1400             | 1110                              | 0.73 | 1160 | 0.84 | 1181 | 0.81 | 1237 | 0.85 | 1293 | 0.89 | 1349 | 0.93 |
| 1500             | 1150                              | 0.82 | 1190 | 1.00 | 1225 | 0.90 | 1271 | 0.95 | 1317 | 1.00 | 1363 | 1.05 |

**551B036 (3 TONS) — HIGH-STATIC MOTOR (BELT DRIVE)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                  | 0.2                               |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 900              | 673                               | 0.18 | 805  | 0.25 | 911  | 0.34 | 988  | 0.43 | 1061 | 0.47 |
| 1000             | 709                               | 0.22 | 836  | 0.30 | 937  | 0.38 | 1039 | 0.49 | 1086 | 0.55 |
| 1100             | 746                               | 0.28 | 867  | 0.35 | 964  | 0.40 | 1068 | 0.55 | 1109 | 0.61 |
| 1200             | 785                               | 0.32 | 903  | 0.41 | 984  | 0.50 | 1090 | 0.64 | 1156 | 0.68 |
| 1300             | 826                               | 0.38 | 942  | 0.48 | 1047 | 0.60 | 1122 | 0.70 | 1190 | 0.76 |
| 1400             | 868                               | 0.45 | 984  | 0.57 | 1087 | 0.67 | 1160 | 0.84 | 1237 | 0.85 |
| 1500             | 911                               | 0.53 | 1029 | 0.66 | 1109 | 0.77 | 1190 | 1.00 | 1271 | 0.95 |

**551B036 (3 TONS) — HIGH-STATIC MOTOR (BELT DRIVE) (cont)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                  | 1.2                               |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 900              | 1105                              | 0.57 | 1140 | 0.63 | 1170 | 0.68 | 1198 | 0.73 | 1224 | 0.77 |
| 1000             | 1136                              | 0.63 | 1172 | 0.69 | 1203 | 0.75 | 1232 | 0.80 | 1258 | 0.86 |
| 1100             | 1145                              | 0.67 | 1181 | 0.73 | 1213 | 0.80 | 1242 | 0.85 | 1268 | 0.91 |
| 1200             | 1210                              | 0.74 | 1248 | 0.81 | 1282 | 0.88 | 1312 | 0.94 | 1340 | 1.01 |
| 1300             | 1266                              | 0.84 | 1306 | 0.92 | 1341 | 1.00 | 1373 | 1.07 | 1402 | 1.14 |
| 1400             | 1349                              | 0.93 | 1391 | 1.02 | 1429 | 1.11 | 1463 | 1.19 | 1494 | 1.26 |
| 1500             | 1363                              | 1.05 | 1406 | 1.15 | 1444 | 1.25 | 1478 | 1.34 | 1510 | 1.43 |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan

#### NOTES:

1. **Boldface** indicates a field-supplied drive is required. (See Note 5.)
2. Maximum continuous bhp is 1.20 for standard motors; 2.40 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan motors up to the ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional

information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

3. Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOP static pressure information.
4. Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
5. Motor drive range: 760 to 1090 rpm for standard motors; 1075 to 1455 rpm for high-static motors. All other rpms require field-supplied drive.
6. Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — VERTICAL DISCHARGE UNITS (cont)

| 551B048 (4 TONS) — STANDARD MOTOR (BELT DRIVE) |                                   |      |     |      |     |      |     |      |      |      |      |      |      |      |
|------------------------------------------------|-----------------------------------|------|-----|------|-----|------|-----|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                               | External Static Pressure (in. wg) |      |     |      |     |      |     |      |      |      |      |      |      |      |
|                                                | 0.1                               |      | 0.2 |      | 0.3 |      | 0.4 |      | 0.6  |      | 0.7  |      | 0.8  |      |
|                                                | Rpm                               | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1200                                           | 542                               | 0.16 | 616 | 0.21 | 678 | 0.27 | 739 | 0.32 | 842  | 0.44 | 886  | 0.50 | 929  | 0.56 |
| 1300                                           | 576                               | 0.20 | 644 | 0.25 | 704 | 0.31 | 764 | 0.37 | 867  | 0.50 | 910  | 0.56 | 952  | 0.62 |
| 1400                                           | 610                               | 0.24 | 673 | 0.30 | 732 | 0.36 | 791 | 0.42 | 889  | 0.55 | 933  | 0.62 | 976  | 0.69 |
| 1500                                           | 646                               | 0.28 | 704 | 0.35 | 761 | 0.42 | 818 | 0.48 | 912  | 0.61 | 957  | 0.69 | 1001 | 0.76 |
| 1600                                           | 681                               | 0.33 | 735 | 0.40 | 790 | 0.47 | 845 | 0.54 | 920  | 0.68 | 931  | 0.76 | 1023 | 0.83 |
| 1700                                           | 718                               | 0.39 | 768 | 0.46 | 836 | 0.54 | 873 | 0.61 | 965  | 0.76 | 1005 | 0.84 | 1045 | 0.91 |
| 1800                                           | 754                               | 0.45 | 801 | 0.53 | 851 | 0.61 | 900 | 0.69 | 992  | 0.84 | 1032 | 0.92 | 1071 | 1.00 |
| 1900                                           | 791                               | 0.52 | 836 | 0.60 | 832 | 0.69 | 828 | 0.77 | 1019 | 0.93 | 1058 | 1.02 | 1097 | 1.10 |
| 2000                                           | 828                               | 0.60 | 870 | 0.68 | 864 | 0.77 | 858 | 0.86 | 1046 | 1.03 | 1085 | 1.12 | 1124 | 1.21 |

| 551B048 (4 TONS) — STANDARD MOTOR (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                      | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |      |      |
|                                                       | 1.0                               |      | 1.1  |      | 1.2  |      | 1.4  |      | 1.6  |      | 1.8  |      |
|                                                       | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1200                                                  | 1008                              | 0.67 | 1052 | 0.73 | 1096 | 0.78 | 1134 | 0.89 | 1203 | 1.00 | —    | —    |
| 1300                                                  | 1029                              | 0.75 | 1065 | 0.81 | 1101 | 0.86 | 1174 | 1.01 | 1229 | 1.15 | 1277 | 1.27 |
| 1400                                                  | 1052                              | 0.83 | 1087 | 0.90 | 1121 | 0.96 | 1183 | 1.09 | 1255 | 1.22 | 1305 | 1.38 |
| 1500                                                  | 1076                              | 0.91 | 1111 | 0.99 | 1145 | 1.06 | 1208 | 1.20 | 1274 | 1.33 | 1337 | 1.47 |
| 1600                                                  | 1100                              | 1.00 | 1134 | 1.08 | 1168 | 1.15 | 1232 | 1.31 | 1291 | 1.46 | 1350 | 1.60 |
| 1700                                                  | 1124                              | 1.09 | 1158 | 1.17 | 1192 | 1.25 | 1255 | 1.42 | 1314 | 1.58 | 1370 | 1.77 |
| 1800                                                  | 1147                              | 1.18 | 1182 | 1.27 | 1217 | 1.36 | 1279 | 1.54 | 1381 | 1.71 | 1393 | 1.89 |
| 1900                                                  | 1169                              | 1.27 | 1205 | 1.37 | 1240 | 1.47 | 1303 | 1.66 | 1408 | 1.85 | 1417 | 2.03 |
| 2000                                                  | 1194                              | 1.38 | 1228 | 1.48 | 1262 | 1.58 | 1327 | 1.78 | 1436 | 1.98 | 1440 | 2.18 |

| 551B048 (4 TONS) — HIGH-STATIC MOTOR (BELT DRIVE) |                                   |      |     |      |      |      |      |      |      |      |      |
|---------------------------------------------------|-----------------------------------|------|-----|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                  | External Static Pressure (in. wg) |      |     |      |      |      |      |      |      |      |      |
|                                                   | 0.2                               |      | 0.4 |      | 0.6  |      | 0.8  |      | 1.0  |      |      |
|                                                   | Rpm                               | Bhp  | Rpm | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Bhp  |
| 1200                                              | 618                               | 0.21 | 739 | 0.32 | 842  | 0.44 | 928  | 0.56 | 1008 | 0.67 | 0.67 |
| 1300                                              | 644                               | 0.25 | 764 | 0.37 | 867  | 0.50 | 952  | 0.62 | 1029 | 0.75 | 0.75 |
| 1400                                              | 673                               | 0.30 | 791 | 0.42 | 889  | 0.55 | 976  | 0.69 | 1052 | 0.83 | 0.83 |
| 1500                                              | 704                               | 0.35 | 818 | 0.48 | 912  | 0.61 | 1001 | 0.76 | 1076 | 0.91 | 0.91 |
| 1600                                              | 736                               | 0.40 | 845 | 0.54 | 920  | 0.68 | 1023 | 0.83 | 1100 | 1.00 | 1.00 |
| 1700                                              | 768                               | 0.46 | 873 | 0.61 | 965  | 0.76 | 1045 | 0.91 | 1124 | 1.09 | 1.09 |
| 1800                                              | 801                               | 0.52 | 900 | 0.69 | 892  | 0.84 | 1071 | 1.00 | 1147 | 1.18 | 1.18 |
| 1900                                              | 836                               | 0.60 | 928 | 0.77 | 1019 | 0.93 | 1097 | 1.10 | 1169 | 1.27 | 1.27 |
| 2000                                              | 870                               | 0.68 | 968 | 0.86 | 1046 | 1.03 | 1124 | 1.21 | 1194 | 1.38 | 1.38 |

| 551B048 (4 TONS) — HIGH-STATIC MOTOR (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |      |      |      |
|----------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                         | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |      |
|                                                          | 1.2                               |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |      |
|                                                          | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Bhp  |
| 1200                                                     | 1096                              | 0.78 | 1134 | 0.89 | 1203 | 1.00 | 1232 | 1.07 | 1258 | 1.14 | 1.14 |
| 1300                                                     | 1101                              | 0.86 | 1174 | 1.01 | 1229 | 1.15 | 1277 | 1.27 | 1304 | 1.35 | 1.35 |
| 1400                                                     | 1121                              | 0.96 | 1183 | 1.09 | 1255 | 1.22 | 1305 | 1.38 | 1333 | 1.47 | 1.47 |
| 1500                                                     | 1145                              | 1.06 | 1208 | 1.20 | 1274 | 1.33 | 1337 | 1.47 | 1365 | 1.57 | 1.57 |
| 1600                                                     | 1168                              | 1.15 | 1232 | 1.31 | 1291 | 1.46 | 1350 | 1.60 | 1379 | 1.70 | 1.70 |
| 1700                                                     | 1192                              | 1.25 | 1255 | 1.42 | 1314 | 1.58 | 1370 | 1.77 | 1399 | 1.89 | 1.89 |
| 1800                                                     | 1217                              | 1.36 | 1279 | 1.54 | 1381 | 1.71 | 1383 | 1.89 | 1423 | 2.01 | 2.01 |
| 1900                                                     | 1240                              | 1.47 | 1303 | 1.66 | 1408 | 1.85 | 1417 | 2.03 | 1447 | 2.16 | 2.16 |
| 2000                                                     | 1262                              | 1.58 | 1327 | 1.78 | 1436 | 1.98 | 1440 | 2.18 | 1471 | 2.32 | 2.32 |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

#### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 6.)
- Field-supplied motor and drive** are required.
- Maximum continuous bhp is 1.20 for standard motors; 2.40 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan

motors up to the ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- Motor drive range: 840 to 1185 rpm for standard motors; 1075 to 1455 rpm for high-static motors. All other rpms require field-supplied drive.
- Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — VERTICAL DISCHARGE UNITS (cont)

**551B060 (5 TONS) — STANDARD MOTOR (BELT DRIVE) — SINGLE-PHASE UNITS**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                  | 0.1                               |      | 0.2  |      | 0.4  |      | 0.6  |      | 0.8  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500             | 711                               | 0.33 | 769  | 0.39 | 878  | 0.51 | 971  | 0.64 | 1052 | 0.78 |
| 1600             | 751                               | 0.39 | 806  | 0.45 | 906  | 0.53 | 1024 | 0.73 | 1087 | 0.88 |
| 1700             | 791                               | 0.46 | 846  | 0.53 | 941  | 0.66 | 1030 | 0.80 | 1112 | 0.96 |
| 1800             | 852                               | 0.55 | 905  | 0.62 | 1002 | 0.78 | 1084 | 0.93 | 1163 | 1.10 |
| 1900             | 894                               | 0.64 | 945  | 0.72 | 1037 | 0.88 | 1119 | 1.04 | 1194 | 1.21 |
| 2000             | 936                               | 0.74 | 984  | 0.82 | 1072 | 0.98 | 1154 | 1.16 | 1226 | 1.33 |
| 2100             | 978                               | 0.85 | 1024 | 0.93 | 1108 | 1.10 | 1190 | 1.29 | 1259 | 1.47 |
| 2200             | 1021                              | 0.97 | 1064 | 1.05 | 1145 | 1.22 | 1225 | 1.43 | 1294 | 1.62 |
| 2300             | 1064                              | 1.10 | 1104 | 1.18 | 1183 | 1.36 | 1260 | 1.57 | 1330 | 1.78 |
| 2400             | 1107                              | 1.24 | 1145 | 1.32 | 1222 | 1.52 | 1296 | 1.73 | 1365 | 1.94 |
| 2500             | 1150                              | 1.39 | 1186 | 1.48 | 1262 | 1.68 | 1331 | 1.89 | 1400 | 2.12 |

**551B060 (5 TONS) — STANDARD MOTOR (BELT DRIVE) — SINGLE-PHASE UNITS (cont)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|
|                  | 1.0                               |      | 1.2  |      | 1.4  |      | 1.6  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500             | 1134                              | 0.95 | 1213 | 1.11 | 1276 | 1.38 | 1331 | 1.49 |
| 1600             | 1159                              | 1.02 | 1231 | 1.20 | 1311 | 1.39 | 1395 | 1.59 |
| 1700             | 1184                              | 1.12 | 1258 | 1.30 | 1322 | 1.49 | 1403 | 1.69 |
| 1800             | 1235                              | 1.29 | 1303 | 1.48 | 1371 | 1.69 | 1433 | 1.90 |
| 1900             | 1266                              | 1.40 | 1330 | 1.59 | 1396 | 1.81 | 1460 | 2.03 |
| 2000             | 1297                              | 1.53 | 1362 | 1.73 | 1422 | 1.94 | 1485 | 2.16 |
| 2100             | 1327                              | 1.66 | 1393 | 1.87 | 1452 | 2.08 | 1510 | 2.31 |
| 2200             | 1359                              | 1.81 | 1423 | 2.02 | 1483 | 2.24 | 1538 | 2.46 |
| 2300             | 1392                              | 1.97 | 1454 | 2.18 | 1515 | 2.41 | 1569 | 2.64 |
| 2400             | 1426                              | 2.15 | 1485 | 2.36 | 1544 | 2.59 | 1601 | 2.84 |
| 2500             | 1461                              | 2.34 | 1518 | 2.55 | 1575 | 2.78 | —    | —    |

**551B060 (5 TONS) — STANDARD MOTOR (BELT DRIVE) — THREE-PHASE UNITS**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                  | 0.1                               |      | 0.2  |      | 0.4  |      | 0.6  |      | 0.8  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500             | 711                               | 0.33 | 769  | 0.39 | 878  | 0.51 | 971  | 0.64 | 1052 | 0.78 |
| 1600             | 751                               | 0.39 | 806  | 0.45 | 906  | 0.53 | 1024 | 0.73 | 1087 | 0.88 |
| 1700             | 791                               | 0.46 | 846  | 0.53 | 941  | 0.66 | 1030 | 0.80 | 1112 | 0.96 |
| 1800             | 852                               | 0.55 | 905  | 0.62 | 1002 | 0.78 | 1084 | 0.93 | 1163 | 1.10 |
| 1900             | 894                               | 0.64 | 945  | 0.72 | 1037 | 0.88 | 1119 | 1.04 | 1194 | 1.21 |
| 2000             | 936                               | 0.74 | 984  | 0.82 | 1072 | 0.98 | 1154 | 1.16 | 1226 | 1.33 |
| 2100             | 978                               | 0.85 | 1024 | 0.93 | 1108 | 1.10 | 1190 | 1.29 | 1259 | 1.47 |
| 2200             | 1021                              | 0.97 | 1064 | 1.05 | 1145 | 1.22 | 1225 | 1.43 | 1294 | 1.62 |
| 2300             | 1064                              | 1.10 | 1104 | 1.18 | 1183 | 1.36 | 1260 | 1.57 | 1330 | 1.78 |
| 2400             | 1107                              | 1.24 | 1145 | 1.32 | 1222 | 1.52 | 1296 | 1.73 | 1365 | 1.94 |
| 2500             | 1150                              | 1.39 | 1186 | 1.48 | 1262 | 1.68 | 1331 | 1.89 | 1400 | 2.12 |

**551B060 (5 TONS) — STANDARD MOTOR (BELT DRIVE) — THREE-PHASE UNITS (cont)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|
|                  | 1.0                               |      | 1.2  |      | 1.4  |      | 1.6  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500             | 1134                              | 0.95 | 1213 | 1.11 | 1276 | 1.38 | 1331 | 1.49 |
| 1600             | 1159                              | 1.02 | 1231 | 1.20 | 1311 | 1.39 | 1395 | 1.59 |
| 1700             | 1184                              | 1.12 | 1258 | 1.30 | 1322 | 1.49 | 1403 | 1.69 |
| 1800             | 1235                              | 1.29 | 1303 | 1.48 | 1371 | 1.69 | 1433 | 1.90 |
| 1900             | 1266                              | 1.40 | 1330 | 1.59 | 1396 | 1.81 | 1460 | 2.03 |
| 2000             | 1297                              | 1.53 | 1362 | 1.73 | 1422 | 1.94 | 1485 | 2.16 |
| 2100             | 1327                              | 1.66 | 1393 | 1.87 | 1452 | 2.08 | 1510 | 2.31 |
| 2200             | 1359                              | 1.81 | 1423 | 2.02 | 1483 | 2.24 | 1538 | 2.46 |
| 2300             | 1392                              | 1.97 | 1454 | 2.18 | 1515 | 2.41 | 1569 | 2.64 |
| 2400             | 1426                              | 2.15 | 1485 | 2.36 | 1544 | 2.59 | 1601 | 2.84 |
| 2500             | 1461                              | 2.34 | 1518 | 2.55 | 1575 | 2.78 | —    | —    |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

#### NOTES:

- 1.** **Boldface** indicates a field-supplied drive is required. (See Note 6.)
- 2.**   indicates field-supplied motor and drive are required.
- 3.** Maximum continuous bhp is 1.80 for single-phase standard motors; 2.40 for 3-phase standard motors; and 2.90 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan motors up to the ratings

shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- 4.** Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
- 5.** Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- 6.** Motor drive range: 1020 to 1460 rpm for single-phase standard motors; 1120 to 1585 for 3-phase standard motors; and 1300 to 1685 for high-static motors. All other rpms require field-supplied drive.
- 7.** Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — VERTICAL DISCHARGE UNITS (cont)

| 551B060 (5 TONS) — HIGH-STATIC MOTOR (BELT DRIVE) |                                   |      |      |      |      |      |      |      |      |      |
|---------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                  | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|                                                   | 0.2                               |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|                                                   | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500                                              | 789                               | 0.40 | 896  | 0.53 | 990  | 0.67 | 1072 | 0.83 | 1153 | 1.00 |
| 1600                                              | 826                               | 0.46 | 931  | 0.61 | 1020 | 0.75 | 1101 | 0.91 | 1178 | 1.09 |
| 1700                                              | 865                               | 0.54 | 966  | 0.69 | 1051 | 0.84 | 1133 | 1.01 | 1206 | 1.18 |
| 1800                                              | 905                               | 0.62 | 1002 | 0.78 | 1084 | 0.93 | 1163 | 1.10 | 1235 | 1.29 |
| 1900                                              | 946                               | 0.72 | 1037 | 0.88 | 1119 | 1.04 | 1194 | 1.21 | 1266 | 1.40 |
| 2000                                              | 984                               | 0.82 | 1072 | 0.98 | 1154 | 1.16 | 1226 | 1.33 | 1297 | 1.53 |
| 2100                                              | 1024                              | 0.93 | 1108 | 1.10 | 1192 | 1.29 | 1259 | 1.47 | 1327 | 1.66 |
| 2200                                              | 1064                              | 1.05 | 1145 | 1.22 | 1225 | 1.43 | 1294 | 1.62 | 1359 | 1.80 |
| 2300                                              | 1104                              | 1.18 | 1183 | 1.36 | 1260 | 1.57 | 1330 | 1.78 | 1392 | 1.97 |
| 2400                                              | 1145                              | 1.32 | 1222 | 1.45 | 1296 | 1.73 | 1365 | 1.94 | 1426 | 2.15 |
| 2500                                              | 1186                              | 1.48 | 1262 | 1.68 | 1331 | 1.80 | 1400 | 2.12 | 1461 | 2.34 |

| 551B060 (5 TONS) — HIGH-STATIC MOTOR (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |      |      |
|----------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                         | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|                                                          | 1.2                               |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                                                          | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500                                                     | 1221                              | 1.17 | 1256 | 1.30 | 1280 | 1.32 | 1320 | 1.22 | 1360 | 1.33 |
| 1600                                                     | 1252                              | 1.27 | 1311 | 1.45 | 1340 | 1.58 | 1380 | 1.61 | 1421 | 1.76 |
| 1700                                                     | 1278                              | 1.37 | 1345 | 1.57 | 1397 | 1.76 | 1424 | 1.89 | 1467 | 2.06 |
| 1800                                                     | 1303                              | 1.48 | 1371 | 1.69 | 1433 | 1.90 | 1480 | 2.09 | 1524 | 2.28 |
| 1900                                                     | 1330                              | 1.59 | 1396 | 1.80 | 1460 | 2.03 | 1517 | 2.25 | 1562 | 2.46 |
| 2000                                                     | 1362                              | 1.73 | 1422 | 1.94 | 1485 | 2.16 | 1544 | 2.40 | 1590 | 2.62 |
| 2100                                                     | 1393                              | 1.80 | 1452 | 2.08 | 1510 | 2.31 | 1569 | 2.55 | 1616 | 2.79 |
| 2200                                                     | 1423                              | 2.02 | 1483 | 2.24 | 1538 | 2.46 | 1595 | 2.71 | 1643 | 2.96 |
| 2300                                                     | 1454                              | 2.18 | 1515 | 2.41 | 1569 | 2.64 | 1622 | 2.88 | 1671 | 3.15 |
| 2400                                                     | 1485                              | 2.36 | 1544 | 2.59 | 1601 | 2.84 | 1652 | 3.07 | 1701 | 3.35 |
| 2500                                                     | 1518                              | 2.55 | 1575 | 2.78 | 1631 | 3.03 | 1684 | 3.28 | 1734 | 3.60 |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

#### NOTES:

1. **Boldface** indicates a field-supplied drive is required. (See Note 6.)
2.   indicates field-supplied motor and drive are required.
3. Maximum continuous bhp is 1.80 for single-phase standard motors; 2.40 for 3-phase standard motors; and 2.90 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan motors up to the ratings

shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

4. Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
5. Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
6. Motor drive range: 1020 to 1460 rpm for single-phase standard motors; 1120 to 1585 for 3-phase standard motors; and 1300 to 1685 for high-static motors. All other rpms require field-supplied drive.
7. Interpolation is permissible. Do not extrapolate.

**PERFORMANCE DATA (cont)**  
**FAN PERFORMANCE — VERTICAL DISCHARGE UNITS (cont)**

| 551B072 (6 TONS) — STANDARD MOTOR (BELT DRIVE) |                                   |      |      |      |      |      |      |      |      |      |
|------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                               | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|                                                | 0.1                               |      | 0.2  |      | 0.4  |      | 0.6  |      | 0.8  |      |
|                                                | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1800                                           | 852                               | 0.55 | 905  | 0.62 | 1002 | 0.78 | 1084 | 0.93 | 1163 | 1.10 |
| 1900                                           | 894                               | 0.64 | 945  | 0.72 | 1037 | 0.88 | 1119 | 1.04 | 1194 | 1.21 |
| 2000                                           | 936                               | 0.74 | 984  | 0.82 | 1072 | 0.98 | 1154 | 1.16 | 1226 | 1.33 |
| 2100                                           | 978                               | 0.85 | 1024 | 0.93 | 1108 | 1.10 | 1190 | 1.29 | 1259 | 1.47 |
| 2200                                           | 1021                              | 0.97 | 1064 | 1.05 | 1145 | 1.22 | 1225 | 1.43 | 1294 | 1.62 |
| 2300                                           | 1064                              | 1.10 | 1104 | 1.18 | 1183 | 1.36 | 1260 | 1.57 | 1330 | 1.78 |
| 2400                                           | 1107                              | 1.24 | 1145 | 1.32 | 1222 | 1.52 | 1296 | 1.73 | 1365 | 1.94 |
| 2500                                           | 1150                              | 1.39 | 1186 | 1.48 | 1262 | 1.68 | 1331 | 1.89 | 1400 | 2.12 |
| 2600                                           | 1193                              | 1.56 | 1228 | 1.65 | 1301 | 1.86 | 1367 | 2.07 | 1435 | 2.31 |
| 2700                                           | 1237                              | 1.74 | 1269 | 1.83 | 1341 | 2.05 | 1404 | 2.26 | 1471 | 2.51 |
| 2800                                           | 1280                              | 1.94 | 1311 | 2.03 | 1381 | 2.25 | 1442 | 2.47 | 1506 | 2.72 |
| 2900                                           | 1324                              | 2.15 | 1354 | 2.24 | 1420 | 2.47 | 1481 | 2.69 | 1542 | 2.94 |
| 3000                                           | 1368                              | 2.37 | 1396 | 2.46 | 1460 | 2.69 | 1521 | 2.93 | —    | —    |

| 551B072 (6 TONS) — STANDARD MOTOR (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |
|-------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                      | External Static Pressure (in. wg) |      |      |      |      |      |      |      |
|                                                       | 1.0                               |      | 1.2  |      | 1.4  |      | 1.6  |      |
|                                                       | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1800                                                  | 1235                              | 1.29 | 1303 | 1.48 | 1371 | 1.69 | 1433 | 1.90 |
| 1900                                                  | 1266                              | 1.40 | 1330 | 1.59 | 1396 | 1.81 | 1460 | 2.03 |
| 2000                                                  | 1297                              | 1.53 | 1362 | 1.73 | 1422 | 1.94 | 1485 | 2.16 |
| 2100                                                  | 1327                              | 1.66 | 1393 | 1.87 | 1452 | 2.08 | 1510 | 2.31 |
| 2200                                                  | 1359                              | 1.81 | 1423 | 2.02 | 1483 | 2.24 | 1538 | 2.46 |
| 2300                                                  | 1392                              | 1.97 | 1454 | 2.18 | 1515 | 2.41 | 1569 | 2.64 |
| 2400                                                  | 1426                              | 2.15 | 1485 | 2.36 | 1544 | 2.59 | 1601 | 2.84 |
| 2500                                                  | 1461                              | 2.34 | 1518 | 2.55 | 1575 | 2.78 | —    | —    |
| 2600                                                  | 1497                              | 2.54 | 1552 | 2.76 | —    | —    | —    | —    |
| 2700                                                  | 1532                              | 2.75 | —    | —    | —    | —    | —    | —    |
| 2800                                                  | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 2900                                                  | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 3000                                                  | —                                 | —    | —    | —    | —    | —    | —    | —    |

| 551B072 (6 TONS) — HIGH-STATIC MOTOR (BELT DRIVE) |                                   |      |      |      |      |      |      |      |      |      |
|---------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                  | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|                                                   | 0.2                               |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|                                                   | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1800                                              | 906                               | 0.62 | 1002 | 0.78 | 1084 | 0.93 | 1163 | 1.10 | 1235 | 1.29 |
| 1900                                              | 945                               | 0.72 | 1037 | 0.88 | 1119 | 1.04 | 1194 | 1.21 | 1266 | 1.40 |
| 2000                                              | 984                               | 0.82 | 1072 | 0.98 | 1154 | 1.16 | 1226 | 1.33 | 1297 | 1.63 |
| 2100                                              | 1024                              | 0.93 | 1108 | 1.10 | 1190 | 1.29 | 1259 | 1.47 | 1327 | 1.66 |
| 2200                                              | 1064                              | 1.05 | 1145 | 1.22 | 1225 | 1.43 | 1294 | 1.62 | 1359 | 1.81 |
| 2300                                              | 1104                              | 1.18 | 1183 | 1.36 | 1260 | 1.57 | 1330 | 1.78 | 1392 | 1.97 |
| 2400                                              | 1145                              | 1.32 | 1222 | 1.52 | 1296 | 1.73 | 1365 | 1.94 | 1426 | 2.15 |
| 2500                                              | 1186                              | 1.48 | 1262 | 1.68 | 1331 | 1.89 | 1400 | 2.12 | 1461 | 2.34 |
| 2600                                              | 1228                              | 1.66 | 1301 | 1.86 | 1367 | 2.07 | 1435 | 2.31 | 1497 | 2.54 |
| 2700                                              | 1269                              | 1.83 | 1341 | 2.05 | 1404 | 2.26 | 1471 | 2.51 | 1532 | 2.75 |
| 2800                                              | 1311                              | 2.03 | 1381 | 2.25 | 1442 | 2.47 | 1506 | 2.72 | 1603 | 3.28 |
| 2900                                              | 1354                              | 2.24 | 1420 | 2.47 | 1481 | 2.69 | 1542 | 2.94 | 1641 | 3.55 |
| 3000                                              | 1396                              | 2.46 | 1460 | 2.69 | 1521 | 2.93 | 1649 | 3.73 | 1755 | 4.50 |

| 551B072 (6 TONS) — HIGH-STATIC MOTOR (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |      |      |
|----------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                         | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|                                                          | 1.2                               |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                                                          | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1800                                                     | 1303                              | 1.48 | 1371 | 1.69 | 1433 | 1.90 | 1481 | 2.10 | 1525 | 2.29 |
| 1900                                                     | 1330                              | 1.59 | 1396 | 1.81 | 1460 | 2.03 | 1509 | 2.24 | 1554 | 2.45 |
| 2000                                                     | 1362                              | 1.73 | 1422 | 1.94 | 1485 | 2.16 | 1535 | 2.38 | 1581 | 2.61 |
| 2100                                                     | 1393                              | 1.87 | 1452 | 2.08 | 1510 | 2.31 | 1561 | 2.65 | 1607 | 2.79 |
| 2200                                                     | 1423                              | 2.02 | 1483 | 2.24 | 1538 | 2.46 | 1590 | 2.72 | 1637 | 2.97 |
| 2300                                                     | 1454                              | 2.18 | 1515 | 2.41 | 1569 | 2.64 | 1622 | 2.91 | 1670 | 3.18 |
| 2400                                                     | 1485                              | 2.36 | 1544 | 2.59 | 1601 | 2.84 | 1655 | 3.14 | 1704 | 3.43 |
| 2500                                                     | 1518                              | 2.55 | 1575 | 2.78 | 1635 | 3.11 | 1690 | 3.43 | 1740 | 3.75 |
| 2600                                                     | 1552                              | 2.76 | 1620 | 3.14 | 1662 | 3.51 | 1739 | 3.88 | 1791 | 4.24 |
| 2700                                                     | 1612                              | 3.21 | 1683 | 3.65 | 1747 | 4.08 | —    | —    | —    | —    |
| 2800                                                     | 1687                              | 3.82 | 1761 | 4.36 | —    | —    | —    | —    | —    | —    |
| 2900                                                     | 1727                              | 4.13 | —    | —    | —    | —    | —    | —    | —    | —    |
| 3000                                                     | —                                 | —    | —    | —    | —    | —    | —    | —    | —    | —    |

**LEGEND**  
**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

**NOTES:**

1. **Boldface** indicates a field-supplied drive is required. (See Note 6.)
2. **Shaded** indicates field-supplied motor and drive are required.
3. Maximum continuous bhp is 2.40 for standard motors; 2.90 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan motors up to the ratings shown will not result in nuisance tripping or

premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

4. Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
5. Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
6. Motor drive range: 1120 to 1585 rpm for standard motors; 1300 to 1685 rpm for high-static motors. All other rpms require field-supplied drive.
7. Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — VERTICAL DISCHARGE UNITS (cont)

| 551B090 (7½ TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE) |                                   |      |     |      |     |      |     |      |     |      |     |      |
|-----------------------------------------------------------------|-----------------------------------|------|-----|------|-----|------|-----|------|-----|------|-----|------|
| Airflow<br>(Cfm)                                                | External Static Pressure (in. wg) |      |     |      |     |      |     |      |     |      |     |      |
|                                                                 | 0.2                               |      | 0.4 |      | 0.6 |      | 0.8 |      | 1.0 |      | 1.2 |      |
|                                                                 | Rpm                               | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  |
| 2250                                                            | 511                               | 0.52 | 592 | 0.74 | 659 | 0.95 | 722 | 1.19 | 778 | 1.43 | 829 | 1.68 |
| 2300                                                            | 518                               | 0.55 | 599 | 0.77 | 665 | 0.98 | 727 | 1.22 | 783 | 1.47 | 834 | 1.72 |
| 2400                                                            | 534                               | 0.61 | 613 | 0.84 | 677 | 1.06 | 738 | 1.30 | 794 | 1.55 | 844 | 1.81 |
| 2500                                                            | 549                               | 0.67 | 627 | 0.90 | 690 | 1.14 | 750 | 1.38 | 805 | 1.64 | 855 | 1.91 |
| 2550                                                            | 557                               | 0.71 | 633 | 0.94 | 697 | 1.18 | 756 | 1.42 | 811 | 1.69 | 861 | 1.96 |
| 2600                                                            | 565                               | 0.74 | 639 | 0.97 | 703 | 1.22 | 761 | 1.46 | 816 | 1.74 | 866 | 2.01 |
| 2700                                                            | 581                               | 0.81 | 652 | 1.04 | 717 | 1.31 | 773 | 1.55 | 827 | 1.83 | 878 | 2.12 |
| 2800                                                            | 597                               | 0.89 | 665 | 1.12 | 733 | 1.40 | 786 | 1.66 | 839 | 1.93 | 889 | 2.23 |
| 2900                                                            | 613                               | 0.97 | 679 | 1.20 | 745 | 1.50 | 799 | 1.76 | 850 | 2.04 | 900 | 2.34 |
| 3000                                                            | 629                               | 1.06 | 694 | 1.29 | 759 | 1.59 | 812 | 1.88 | 862 | 2.15 | 911 | 2.46 |
| 3100                                                            | 646                               | 1.15 | 709 | 1.39 | 772 | 1.70 | 825 | 1.99 | 875 | 2.28 | 923 | 2.58 |
| 3200                                                            | 662                               | 1.25 | 724 | 1.50 | 785 | 1.80 | 840 | 2.11 | 887 | 2.41 | 934 | 2.71 |
| 3300                                                            | 679                               | 1.35 | 740 | 1.61 | 798 | 1.91 | 854 | 2.24 | 900 | 2.54 | 946 | 2.85 |
| 3400                                                            | 696                               | 1.46 | 756 | 1.73 | 811 | 2.02 | 868 | 2.37 | 914 | 2.69 | 959 | 3.00 |
| 3500                                                            | 712                               | 1.57 | 771 | 1.85 | 824 | 2.14 | 881 | 2.50 | 928 | 2.84 | 971 | 3.16 |
| 3600                                                            | 729                               | 1.69 | 787 | 1.98 | 839 | 2.21 | 894 | 2.64 | 942 | 2.99 | 984 | 3.22 |
| 3700                                                            | 746                               | 1.85 | 803 | 2.12 | 854 | 2.42 | 907 | 2.78 | 956 | 3.15 | 997 | 3.49 |
| 3750                                                            | 755                               | 1.89 | 811 | 2.20 | 862 | 2.49 | 914 | 2.85 | 963 | 3.23 | —   | —    |

| 551B090 (7½ TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |
|------------------------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                                       | External Static Pressure (in. wg) |      |      |      |      |      |      |      |
|                                                                        | 1.4                               |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                                                                        | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 2250                                                                   | 884                               | 1.97 | 937  | 2.33 | 947  | 2.66 | 1022 | 3.10 |
| 2300                                                                   | 885                               | 2.00 | 939  | 2.36 | 979  | 2.69 | 1025 | 3.12 |
| 2400                                                                   | 892                               | 2.08 | 944  | 2.40 | 987  | 2.76 | 1039 | 3.20 |
| 2500                                                                   | 902                               | 2.18 | 949  | 2.48 | 1002 | 2.84 | 1041 | 3.25 |
| 2550                                                                   | 908                               | 2.24 | 953  | 2.53 | 1003 | 2.87 | 1045 | 3.28 |
| 2600                                                                   | 913                               | 2.29 | 957  | 2.58 | 1004 | 2.91 | 1050 | 3.31 |
| 2700                                                                   | 924                               | 2.40 | 967  | 2.70 | 1010 | 3.01 | 1056 | 3.37 |
| 2800                                                                   | 935                               | 2.52 | 978  | 2.62 | 1019 | 3.13 | 1061 | 3.47 |
| 2900                                                                   | 946                               | 2.65 | 989  | 2.96 | 1030 | 3.27 | —    | —    |
| 3000                                                                   | 957                               | 2.78 | 1000 | 3.09 | 1040 | 3.41 | —    | —    |
| 3100                                                                   | 968                               | 2.91 | 1011 | 3.24 | —    | —    | —    | —    |
| 3200                                                                   | 980                               | 3.04 | 1022 | 3.38 | —    | —    | —    | —    |
| 3300                                                                   | 991                               | 3.18 | —    | —    | —    | —    | —    | —    |
| 3400                                                                   | 1003                              | 3.32 | —    | —    | —    | —    | —    | —    |
| 3500                                                                   | 1014                              | 3.48 | —    | —    | —    | —    | —    | —    |
| 3600                                                                   | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 3700                                                                   | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 3750                                                                   | —                                 | —    | —    | —    | —    | —    | —    | —    |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

#### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 6.)
- High-Static** indicates a high-static motor and drive is required.
- Maximum continuous bhp is 2.90 for standard motors; 4.20 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan

motors up to the ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- Standard motor drive range: 840 to 1085 rpm. High-static motor drive range is 860 to 1080 rpm. All other rpms require field-supplied drive.
- Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — VERTICAL DISCHARGE UNITS (cont)

**551B102 (8½ TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |     |      |     |      |     |      |     |      |     |      |
|------------------|-----------------------------------|------|-----|------|-----|------|-----|------|-----|------|-----|------|
|                  | 0.2                               |      | 0.4 |      | 0.6 |      | 0.8 |      | 1.0 |      | 1.2 |      |
|                  | Rpm                               | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  |
| 2550             | 557                               | 0.71 | 633 | 0.94 | 697 | 1.18 | 756 | 1.42 | 811 | 1.69 | 861 | 1.96 |
| 2600             | 565                               | 0.74 | 639 | 0.97 | 703 | 1.22 | 761 | 1.46 | 816 | 1.74 | 866 | 2.01 |
| 2700             | 581                               | 0.81 | 652 | 1.04 | 717 | 1.31 | 773 | 1.55 | 827 | 1.83 | 878 | 2.12 |
| 2800             | 597                               | 0.89 | 665 | 1.12 | 733 | 1.40 | 786 | 1.66 | 839 | 1.93 | 889 | 2.23 |
| 2900             | 613                               | 0.97 | 679 | 1.20 | 745 | 1.50 | 799 | 1.76 | 850 | 2.04 | 900 | 2.34 |
| 3000             | 629                               | 1.06 | 694 | 1.29 | 759 | 1.59 | 812 | 1.88 | 862 | 2.15 | 911 | 2.46 |
| 3100             | 646                               | 1.15 | 709 | 1.39 | 772 | 1.70 | 825 | 1.99 | 875 | 2.28 | 923 | 2.58 |
| 3200             | 662                               | 1.25 | 724 | 1.50 | 785 | 1.80 | 840 | 2.11 | 887 | 2.41 | 934 | 2.71 |
| 3300             | 679                               | 1.35 | 740 | 1.61 | 798 | 1.91 | 854 | 2.24 | 900 | 2.54 | 946 | 2.85 |
| 3400             | 696                               | 1.46 | 756 | 1.73 | 811 | 2.02 | 868 | 2.37 | 914 | 2.69 | 959 | 3.00 |
| 3500             | 712                               | 1.57 | 771 | 1.85 | 824 | 2.14 | 881 | 2.50 | 928 | 2.84 | 971 | 3.16 |
| 3600             | 729                               | 1.69 | 787 | 1.98 | 839 | 2.27 | 894 | 2.64 | 942 | 2.99 | 984 | 3.32 |
| 3700             | 746                               | 1.82 | 803 | 2.12 | 854 | 2.42 | 907 | 2.78 | 956 | 3.15 | 997 | 3.49 |
| 3750             | 755                               | 1.89 | 811 | 2.20 | 862 | 2.49 | 914 | 2.85 | 963 | 3.23 | —   | —    |
| 3800             | 763                               | 1.95 | 819 | 2.27 | 869 | 2.56 | 920 | 2.92 | 970 | 3.31 | —   | —    |
| 3900             | 780                               | 2.09 | 835 | 2.42 | 884 | 2.72 | 933 | 3.07 | 983 | 3.48 | —   | —    |
| 4000             | 796                               | 2.23 | 851 | 2.56 | 900 | 2.89 | 946 | 3.23 | —   | —    | —   | —    |
| 4100             | 813                               | 2.39 | 867 | 2.74 | 915 | 3.06 | 960 | 3.40 | —   | —    | —   | —    |
| 4200             | 830                               | 2.55 | 883 | 2.91 | 931 | 3.24 | —   | —    | —   | —    | —   | —    |
| 4250             | 839                               | 2.63 | 892 | 3.00 | 939 | 3.34 | —   | —    | —   | —    | —   | —    |

**551B102 (8½ TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE) (cont)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|
|                  | 1.4                               |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 2550             | 908                               | 2.24 | 953  | 2.53 | 1003 | 2.87 | 1045 | 3.28 |
| 2600             | 913                               | 2.29 | 957  | 2.58 | 1004 | 2.91 | 1050 | 3.31 |
| 2700             | 924                               | 2.40 | 967  | 2.70 | 1010 | 3.01 | 1056 | 3.37 |
| 2800             | 935                               | 2.52 | 978  | 2.82 | 1019 | 3.13 | 1061 | 3.41 |
| 2900             | 946                               | 2.65 | 989  | 2.96 | 1030 | 3.27 | —    | —    |
| 3000             | 957                               | 2.78 | 1000 | 3.09 | 1040 | 3.41 | —    | —    |
| 3100             | 968                               | 2.91 | 1011 | 3.24 | —    | —    | —    | —    |
| 3200             | 980                               | 3.04 | 1022 | 3.38 | —    | —    | —    | —    |
| 3300             | 991                               | 3.18 | —    | —    | —    | —    | —    | —    |
| 3400             | 1003                              | 3.32 | —    | —    | —    | —    | —    | —    |
| 3500             | 1014                              | 3.48 | —    | —    | —    | —    | —    | —    |
| 3600             | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 3700             | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 3750             | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 3800             | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 3900             | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 4000             | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 4100             | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 4200             | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 4250             | —                                 | —    | —    | —    | —    | —    | —    | —    |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOP** — Factory-Installed Option

#### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 6.)
- Shaded** indicates a high-static motor and drive is required.
- Maximum continuous bhp is 2.90 for standard motors; 4.20 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan

motors up to the ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOP static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- Standard motor drive range: 840 to 1085 rpm. High-static motor drive range is 860 to 1080 rpm. All other rpms require field-supplied drive.
- Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — VERTICAL DISCHARGE UNITS (cont)

| 551B120 (10 TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE) |                                   |      |     |      |     |      |     |      |      |      |      |      |
|-----------------------------------------------------------------|-----------------------------------|------|-----|------|-----|------|-----|------|------|------|------|------|
| Airflow<br>(Cfm)                                                | External Static Pressure (in. wg) |      |     |      |     |      |     |      |      |      |      |      |
|                                                                 | 0.2                               |      | 0.4 |      | 0.6 |      | 0.8 |      | 1.0  |      | 1.2  |      |
|                                                                 | Rpm                               | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 3000                                                            | 459                               | 0.46 | 625 | 0.85 | 691 | 1.01 | 734 | 1.10 | 787  | 1.30 | 829  | 1.50 |
| 3100                                                            | 478                               | 0.57 | 637 | 0.90 | 702 | 1.08 | 744 | 1.16 | 796  | 1.36 | 837  | 1.56 |
| 3200                                                            | 500                               | 0.62 | 647 | 0.97 | 712 | 1.16 | 753 | 1.23 | 805  | 1.43 | 845  | 1.63 |
| 3300                                                            | 519                               | 0.69 | 658 | 1.03 | 721 | 1.23 | 762 | 1.30 | 814  | 1.50 | 853  | 1.71 |
| 3400                                                            | 537                               | 0.77 | 669 | 1.10 | 731 | 1.30 | 773 | 1.38 | 823  | 1.57 | 862  | 1.78 |
| 3500                                                            | 561                               | 0.86 | 680 | 1.17 | 741 | 1.37 | 784 | 1.47 | 832  | 1.65 | 871  | 1.86 |
| 3600                                                            | 592                               | 0.98 | 692 | 1.24 | 751 | 1.45 | 796 | 1.57 | 841  | 1.72 | 880  | 1.95 |
| 3700                                                            | 654                               | 1.12 | 714 | 1.31 | 767 | 1.50 | 815 | 1.67 | 861  | 1.85 | 906  | 2.08 |
| 3800                                                            | 668                               | 1.20 | 727 | 1.40 | 780 | 1.60 | 827 | 1.77 | 873  | 1.95 | 916  | 2.18 |
| 3900                                                            | 683                               | 1.28 | 741 | 1.49 | 793 | 1.70 | 839 | 1.88 | 884  | 2.05 | 927  | 2.28 |
| 4000                                                            | 697                               | 1.37 | 754 | 1.59 | 806 | 1.80 | 851 | 1.99 | 895  | 2.16 | 938  | 2.38 |
| 4100                                                            | 711                               | 1.46 | 767 | 1.69 | 819 | 1.90 | 864 | 2.10 | 907  | 2.28 | 949  | 2.49 |
| 4200                                                            | 726                               | 1.56 | 780 | 1.80 | 832 | 2.01 | 877 | 2.22 | 919  | 2.41 | 960  | 2.60 |
| 4300                                                            | 741                               | 1.66 | 794 | 1.91 | 845 | 2.12 | 889 | 2.35 | 931  | 2.54 | 971  | 2.72 |
| 4400                                                            | 755                               | 1.77 | 808 | 2.03 | 858 | 2.24 | 902 | 2.48 | 943  | 2.68 | 983  | 2.86 |
| 4500                                                            | 770                               | 1.89 | 821 | 2.15 | 871 | 2.37 | 915 | 2.61 | 955  | 2.82 | 995  | 3.01 |
| 4600                                                            | 784                               | 2.00 | 835 | 2.27 | 884 | 2.49 | 928 | 2.75 | 968  | 2.96 | 1006 | 3.17 |
| 4700                                                            | 799                               | 2.13 | 849 | 2.40 | 897 | 2.63 | 941 | 2.88 | 981  | 3.11 | 1018 | 3.32 |
| 4800                                                            | 814                               | 2.25 | 863 | 2.53 | 910 | 2.77 | 954 | 3.02 | 993  | 3.27 | 1030 | 3.48 |
| 4900                                                            | 829                               | 2.39 | 877 | 2.67 | 923 | 2.92 | 967 | 3.17 | 1006 | 3.43 | 1043 | 3.65 |
| 5000                                                            | 843                               | 2.52 | 892 | 2.81 | 937 | 3.08 | 980 | 3.32 | 1019 | 3.60 | 1055 | 3.82 |

| 551B120 (10 TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |
|------------------------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                                       | External Static Pressure (in. wg) |      |      |      |      |      |      |      |
|                                                                        | 1.4                               |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                                                                        | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 3000                                                                   | 886                               | 1.73 | 943  | 1.88 | 988  | 1.91 | 995  | 1.95 |
| 3100                                                                   | 892                               | 1.78 | 947  | 2.00 | 995  | 2.05 | 1008 | 2.07 |
| 3200                                                                   | 899                               | 1.85 | 951  | 2.06 | 1000 | 2.17 | 1021 | 2.20 |
| 3300                                                                   | 907                               | 1.93 | 959  | 2.10 | 1004 | 2.33 | 1036 | 2.36 |
| 3400                                                                   | 915                               | 2.01 | 966  | 2.17 | 1009 | 2.46 | 1043 | 2.47 |
| 3500                                                                   | 924                               | 2.09 | 974  | 2.24 | 1015 | 2.51 | 1054 | 2.59 |
| 3600                                                                   | 933                               | 2.18 | 983  | 2.32 | 1023 | 2.58 | 1058 | 2.70 |
| 3700                                                                   | 950                               | 2.27 | 991  | 2.47 | 1030 | 2.65 | 1064 | 2.82 |
| 3800                                                                   | 959                               | 2.38 | 1001 | 2.58 | 1040 | 2.78 | 1075 | 2.96 |
| 3900                                                                   | 969                               | 2.50 | 1010 | 2.70 | 1049 | 2.91 | 1085 | 3.11 |
| 4000                                                                   | 979                               | 2.62 | 1020 | 2.83 | 1059 | 3.04 | 1095 | 3.25 |
| 4100                                                                   | 989                               | 2.74 | 1029 | 2.96 | 1068 | 3.18 | 1105 | 3.39 |
| 4200                                                                   | 1000                              | 2.86 | 1039 | 3.10 | 1077 | 3.31 | 1114 | 3.54 |
| 4300                                                                   | 1011                              | 2.97 | 1049 | 3.23 | 1087 | 3.46 | 1124 | 3.69 |
| 4400                                                                   | 1022                              | 3.10 | 1059 | 3.37 | 1097 | 3.61 | 1133 | 3.84 |
| 4500                                                                   | 1033                              | 3.23 | 1070 | 3.51 | 1107 | 3.76 | 1143 | 4.00 |
| 4600                                                                   | 1044                              | 3.37 | 1081 | 3.64 | 1117 | 3.92 | 1152 | 4.17 |
| 4700                                                                   | 1056                              | 3.52 | 1092 | 3.78 | 1127 | 4.07 | 1162 | 4.33 |
| 4800                                                                   | 1057                              | 3.69 | 1103 | 3.93 | 1138 | 4.23 | 1172 | 4.50 |
| 4900                                                                   | 1079                              | 3.87 | 1114 | 4.09 | 1149 | 4.37 | 1182 | 4.68 |
| 5000                                                                   | 1091                              | 4.05 | 1126 | 4.25 | 1160 | 4.53 | 1193 | 4.85 |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**F1OP** — Factory-Installed Option

#### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 6.)
- Shaded** indicates a high-static motor and drive is required.
- Maximum continuous bhp is 3.70 for standard motors; 5.25 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan

motors up to the ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/F1OP static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- Standard motor drive range: 860 to 1080 rpm. High-static motor drive range: 830 to 1130. All other rpms require field-supplied drive.
- Interpolation is permissible. Do not extrapolate.

# PERFORMANCE DATA (cont)

## FAN PERFORMANCE — VERTICAL DISCHARGE UNITS (cont)

| 551B150 (12½ TONS) — STANDARD MOTORS (BELT DRIVE) |                                   |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                  | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |      |      |
|                                                   | 0.2                               |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      | 1.2  |      |
|                                                   | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 3700                                              | —                                 | —    | —    | —    | —    | —    | —    | —    | 861  | 1.85 | 906  | 2.08 |
| 3800                                              | —                                 | —    | —    | —    | —    | —    | —    | —    | 873  | 1.95 | 916  | 2.18 |
| 3900                                              | —                                 | —    | —    | —    | —    | —    | —    | —    | 884  | 2.05 | 927  | 2.28 |
| 4000                                              | —                                 | —    | —    | —    | —    | —    | —    | —    | 895  | 2.16 | 938  | 2.38 |
| 4100                                              | —                                 | —    | —    | —    | —    | —    | 864  | 2.10 | 907  | 2.28 | 949  | 2.49 |
| 4200                                              | —                                 | —    | —    | —    | —    | —    | 877  | 2.22 | 919  | 2.41 | 960  | 2.60 |
| 4300                                              | —                                 | —    | —    | —    | —    | —    | 889  | 2.35 | 931  | 2.54 | 971  | 2.72 |
| 4400                                              | —                                 | —    | —    | —    | —    | —    | 902  | 2.48 | 943  | 2.68 | 983  | 2.86 |
| 4500                                              | —                                 | —    | —    | —    | 871  | 2.37 | 915  | 2.61 | 955  | 2.82 | 995  | 3.01 |
| 4600                                              | —                                 | —    | —    | —    | 884  | 2.49 | 928  | 2.75 | 968  | 2.96 | 1006 | 3.17 |
| 4700                                              | —                                 | —    | —    | —    | 897  | 2.63 | 941  | 2.88 | 981  | 3.11 | 1018 | 3.32 |
| 4800                                              | —                                 | —    | 863  | 2.53 | 910  | 2.77 | 954  | 3.02 | 993  | 3.27 | 1030 | 3.48 |
| 4900                                              | —                                 | —    | 877  | 2.67 | 923  | 2.92 | 967  | 3.17 | 1006 | 3.43 | 1043 | 3.65 |
| 5000                                              | —                                 | —    | 892  | 2.81 | 937  | 3.08 | 980  | 3.32 | 1019 | 3.60 | 1055 | 3.82 |
| 5100                                              | —                                 | —    | 906  | 2.95 | 950  | 3.24 | 993  | 3.48 | 1032 | 3.76 | 1068 | 4.00 |
| 5200                                              | 873                               | 2.82 | 920  | 3.10 | 963  | 3.40 | 1006 | 3.65 | 1045 | 3.93 | 1081 | 4.19 |
| 5300                                              | 888                               | 2.97 | 934  | 3.26 | 977  | 3.57 | 1019 | 3.82 | 1058 | 4.11 | 1094 | 4.38 |
| 5400                                              | 903                               | 3.13 | 949  | 3.43 | 991  | 3.75 | 1032 | 4.00 | 1071 | 4.29 | 1106 | 4.57 |
| 5500                                              | 918                               | 3.30 | 963  | 3.59 | 1004 | 3.92 | 1045 | 4.18 | 1084 | 4.47 | 1119 | 4.77 |
| 5600                                              | 933                               | 3.47 | 978  | 3.77 | 1018 | 4.11 | 1058 | 4.38 | 1097 | 4.66 | 1132 | 4.97 |
| 5700                                              | 948                               | 3.65 | 992  | 3.95 | 1032 | 4.30 | 1072 | 4.58 | 1110 | 4.86 | 1145 | 5.18 |
| 5800                                              | 963                               | 3.83 | 1006 | 4.14 | 1046 | 4.50 | 1085 | 4.79 | 1123 | 5.07 | —    | —    |
| 5900                                              | 978                               | 4.00 | 1021 | 4.34 | 1060 | 4.69 | 1098 | 5.01 | —    | —    | —    | —    |
| 6000                                              | 993                               | 4.22 | 1035 | 4.54 | 1074 | 4.91 | 1112 | 5.23 | —    | —    | —    | —    |
| 6100                                              | 1008                              | 4.42 | 1050 | 4.75 | 1089 | 5.10 | —    | —    | —    | —    | —    | —    |
| 6200                                              | 1023                              | 4.63 | 1065 | 4.96 | —    | —    | —    | —    | —    | —    | —    | —    |
| 6300                                              | 1038                              | 4.85 | 1079 | 5.19 | —    | —    | —    | —    | —    | —    | —    | —    |

| 551B150 (12½ TONS) — STANDARD MOTORS (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |
|----------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                         | External Static Pressure (in. wg) |      |      |      |      |      |      |      |
|                                                          | 1.4                               |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                                                          | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 3700                                                     | 950                               | 2.27 | 991  | 2.47 | 1030 | 2.65 | 1064 | 2.82 |
| 3800                                                     | 959                               | 2.38 | 1001 | 2.58 | 1040 | 2.78 | 1075 | 2.96 |
| 3900                                                     | 969                               | 2.50 | 1010 | 2.70 | 1049 | 2.91 | 1085 | 3.11 |
| 4000                                                     | 979                               | 2.62 | 1020 | 2.83 | 1059 | 3.04 | 1095 | 3.25 |
| 4100                                                     | 989                               | 2.74 | 1029 | 2.96 | 1068 | 3.18 | 1105 | 3.39 |
| 4200                                                     | 1000                              | 2.86 | 1039 | 3.10 | 1077 | 3.31 | 1114 | 3.54 |
| 4300                                                     | 1011                              | 2.97 | 1049 | 3.23 | 1087 | 3.46 | 1124 | 3.69 |
| 4400                                                     | 1022                              | 3.10 | 1059 | 3.37 | 1097 | 3.61 | 1133 | 3.84 |
| 4500                                                     | 1033                              | 3.23 | 1070 | 3.51 | 1107 | 3.76 | 1143 | 4.00 |
| 4600                                                     | 1044                              | 3.37 | 1081 | 3.64 | 1117 | 3.92 | 1152 | 4.17 |
| 4700                                                     | 1056                              | 3.52 | 1092 | 3.78 | 1127 | 4.07 | 1162 | 4.33 |
| 4800                                                     | 1057                              | 3.69 | 1103 | 3.93 | 1138 | 4.23 | 1172 | 4.50 |
| 4900                                                     | 1079                              | 3.87 | 1114 | 4.09 | 1149 | 4.37 | 1182 | 4.68 |
| 5000                                                     | 1091                              | 4.05 | 1126 | 4.25 | 1160 | 4.53 | 1193 | 4.85 |
| 5100                                                     | 1103                              | 4.23 | 1137 | 4.45 | 1171 | 4.70 | 1204 | 5.01 |
| 5200                                                     | 1115                              | 4.42 | 1149 | 4.65 | 1182 | 4.91 | 1215 | 5.18 |
| 5300                                                     | 1127                              | 4.62 | 1161 | 4.85 | 1194 | 5.07 | —    | —    |
| 5400                                                     | 1139                              | 4.82 | 1173 | 5.06 | —    | —    | —    | —    |
| 5500                                                     | 1152                              | 5.03 | —    | —    | —    | —    | —    | —    |
| 5600                                                     | 1165                              | 5.24 | —    | —    | —    | —    | —    | —    |
| 5700                                                     | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 5800                                                     | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 5900                                                     | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 6000                                                     | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 6100                                                     | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 6200                                                     | —                                 | —    | —    | —    | —    | —    | —    | —    |
| 6300                                                     | —                                 | —    | —    | —    | —    | —    | —    | —    |

### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

### NOTES:

1. **Boldface** indicates field-supplied drive is required. (See Note 5.)
2. Maximum continuous bhp is 5.25. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan motors up to the ratings shown will not result in

nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

3. Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
4. Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
5. Standard motor drive range: 900 to 1260 rpm.
6. Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — HORIZONTAL DISCHARGE UNITS

| 551B036 (3 TONS) — STANDARD MOTOR (BELT DRIVE) |                                   |      |     |      |     |      |     |      |     |      |      |      |
|------------------------------------------------|-----------------------------------|------|-----|------|-----|------|-----|------|-----|------|------|------|
| Airflow<br>(Cfm)                               | External Static Pressure (in. wg) |      |     |      |     |      |     |      |     |      |      |      |
|                                                | 0.1                               |      | 0.2 |      | 0.3 |      | 0.4 |      | 0.5 |      | 0.6  |      |
|                                                | Rpm                               | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm  | Bhp  |
| 900                                            | 526                               | 0.06 | 584 | 0.08 | 656 | 0.12 | 734 | 0.22 | 818 | 0.25 | 875  | 0.27 |
| 1000                                           | 570                               | 0.09 | 627 | 0.13 | 738 | 0.19 | 800 | 0.26 | 848 | 0.29 | 895  | 0.31 |
| 1100                                           | 614                               | 0.13 | 670 | 0.16 | 758 | 0.23 | 812 | 0.29 | 863 | 0.32 | 914  | 0.35 |
| 1200                                           | 658                               | 0.16 | 710 | 0.23 | 780 | 0.28 | 840 | 0.32 | 889 | 0.36 | 938  | 0.40 |
| 1300                                           | 703                               | 0.20 | 752 | 0.27 | 808 | 0.32 | 868 | 0.37 | 916 | 0.41 | 963  | 0.45 |
| 1400                                           | 725                               | 0.29 | 776 | 0.31 | 845 | 0.38 | 891 | 0.42 | 937 | 0.47 | 983  | 0.51 |
| 1500                                           | 755                               | 0.33 | 816 | 0.38 | 870 | 0.43 | 924 | 0.48 | 969 | 0.53 | 1014 | 0.58 |

| 551B036 (3 TONS) — STANDARD MOTOR (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                      | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |      |      |
|                                                       | 0.7                               |      | 0.8  |      | 0.9  |      | 1.0  |      | 1.1  |      | 1.2  |      |
|                                                       | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 900                                                   | 924                               | 0.32 | 953  | 0.35 | 989  | 0.38 | 1028 | 0.42 | 1074 | 0.49 | 1120 | 0.54 |
| 1000                                                  | 936                               | 0.35 | 977  | 0.39 | 1020 | 0.44 | 1064 | 0.48 | 1124 | 0.54 | 1185 | 0.60 |
| 1100                                                  | 960                               | 0.39 | 1005 | 0.43 | 1052 | 0.49 | 1100 | 0.52 | 1163 | 0.59 | 1225 | 0.65 |
| 1200                                                  | 960                               | 0.45 | 1038 | 0.50 | 1076 | 0.53 | 1136 | 0.59 | 1201 | 0.65 | 1266 | 0.72 |
| 1300                                                  | 1012                              | 0.51 | 1061 | 0.56 | 1090 | 0.61 | 1172 | 0.65 | 1239 | 0.72 | 1306 | 0.79 |
| 1400                                                  | 1027                              | 0.56 | 1071 | 0.60 | 1108 | 0.67 | 1208 | 0.70 | 1278 | 0.79 | 1347 | 0.87 |
| 1500                                                  | 1056                              | 0.63 | 1097 | 0.68 | 1117 | 0.70 | 1245 | 0.74 | 1315 | 0.87 | 1385 | 0.96 |

| 551B036 (3 TONS) — HIGH-STATIC MOTOR (BELT DRIVE) |                                   |      |     |      |      |      |      |      |      |      |      |      |
|---------------------------------------------------|-----------------------------------|------|-----|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                  | External Static Pressure (in. wg) |      |     |      |      |      |      |      |      |      |      |      |
|                                                   | 0.2                               |      | 0.4 |      | 0.6  |      | 0.8  |      | 1.0  |      |      |      |
|                                                   | Rpm                               | Bhp  | Rpm | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 900                                               | 584                               | 0.08 | 734 | 0.22 | 875  | 0.27 | 953  | 0.35 | 1028 | 0.42 | 1064 | 0.48 |
| 1000                                              | 627                               | 0.13 | 800 | 0.26 | 895  | 0.31 | 977  | 0.39 | 1064 | 0.48 | 1100 | 0.52 |
| 1100                                              | 670                               | 0.16 | 812 | 0.29 | 914  | 0.35 | 1005 | 0.43 | 1074 | 0.49 | 1136 | 0.59 |
| 1200                                              | 710                               | 0.23 | 840 | 0.32 | 936  | 0.40 | 1038 | 0.50 | 1100 | 0.52 | 1172 | 0.65 |
| 1300                                              | 752                               | 0.27 | 868 | 0.37 | 963  | 0.45 | 1061 | 0.56 | 1124 | 0.60 | 1208 | 0.70 |
| 1400                                              | 776                               | 0.31 | 891 | 0.42 | 983  | 0.51 | 1071 | 0.60 | 1163 | 0.59 | 1245 | 0.74 |
| 1500                                              | 816                               | 0.38 | 924 | 0.48 | 1014 | 0.58 | 1097 | 0.68 | 1185 | 0.79 | 1266 | 0.87 |

| 551B036 (3 TONS) — HIGH-STATIC MOTOR (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |      |      |      |      |
|----------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                         | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |      |      |
|                                                          | 1.2                               |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |      |      |
|                                                          | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 900                                                      | 1120                              | 0.54 | 1155 | 0.59 | 1186 | 0.64 | 1215 | 0.69 | 1240 | 0.73 | 1266 | 0.78 |
| 1000                                                     | 1185                              | 0.60 | 1222 | 0.66 | 1255 | 0.71 | 1285 | 0.77 | 1312 | 0.82 | 1337 | 0.87 |
| 1100                                                     | 1225                              | 0.65 | 1263 | 0.71 | 1298 | 0.77 | 1328 | 0.83 | 1357 | 0.88 | 1385 | 0.93 |
| 1200                                                     | 1266                              | 0.72 | 1306 | 0.79 | 1341 | 0.86 | 1373 | 0.92 | 1402 | 0.98 | 1428 | 1.05 |
| 1300                                                     | 1306                              | 0.79 | 1347 | 0.87 | 1383 | 0.94 | 1416 | 1.01 | 1446 | 1.07 | 1472 | 1.13 |
| 1400                                                     | 1347                              | 0.87 | 1389 | 0.95 | 1427 | 1.03 | 1461 | 1.11 | 1492 | 1.18 | 1518 | 1.25 |
| 1500                                                     | 1385                              | 0.96 | 1428 | 1.05 | 1467 | 1.14 | 1502 | 1.22 | 1534 | 1.30 | 1566 | 1.38 |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

#### NOTES:

1. **Boldface** indicates a field-supplied drive is required. (See Note 4.)
2. Maximum continuous bhp is 1.20 for standard motors; 2.40 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan motors up to the ratings shown will not result in nuisance tripping or

premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

3. Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
4. Motor drive range: 760 to 1090 rpm for standard motors; 1075 to 1455 rpm for high-static motors. All other rpms require field-supplied drive.
5. Interpolation is permissible. Do not extrapolate.
6. Use of a field-supplied motor may affect wire sizing. Contact your Bryant representative to verify.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — HORIZONTAL DISCHARGE UNITS (cont)

**551B048 (4 TONS) — STANDARD MOTOR (BELT DRIVE)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |     |      |     |      |     |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|-----|------|-----|------|-----|------|------|------|------|------|------|------|
|                  | 0.1                               |      | 0.2 |      | 0.3 |      | 0.4 |      | 0.6  |      | 0.7  |      | 0.8  |      |
|                  | Rpm                               | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1200             | 514                               | 0.15 | 590 | 0.20 | 657 | 0.25 | 723 | 0.30 | 828  | 0.42 | 876  | 0.49 | 924  | 0.55 |
| 1300             | 545                               | 0.18 | 615 | 0.23 | 680 | 0.29 | 744 | 0.35 | 849  | 0.47 | 895  | 0.54 | 940  | 0.60 |
| 1400             | 577                               | 0.21 | 642 | 0.27 | 704 | 0.33 | 766 | 0.39 | 870  | 0.52 | 915  | 0.59 | 959  | 0.66 |
| 1500             | 609                               | 0.26 | 670 | 0.31 | 729 | 0.38 | 788 | 0.44 | 892  | 0.58 | 936  | 0.65 | 980  | 0.72 |
| 1600             | 642                               | 0.30 | 699 | 0.36 | 755 | 0.43 | 811 | 0.49 | 913  | 0.64 | 957  | 0.72 | 1001 | 0.79 |
| 1700             | 675                               | 0.36 | 728 | 0.42 | 782 | 0.49 | 836 | 0.55 | 935  | 0.71 | 979  | 0.79 | 1023 | 0.86 |
| 1800             | 709                               | 0.41 | 759 | 0.48 | 810 | 0.55 | 860 | 0.62 | 957  | 0.78 | 1001 | 0.86 | 1044 | 0.94 |
| 1900             | 743                               | 0.48 | 790 | 0.55 | 838 | 0.62 | 886 | 0.69 | 980  | 0.86 | 1023 | 0.95 | 1066 | 1.03 |
| 2000             | 778                               | 0.55 | 836 | 0.62 | 875 | 0.70 | 913 | 0.77 | 1004 | 0.94 | 1046 | 1.03 | 1088 | 1.12 |

**551B048 (4 TONS) — STANDARD MOTOR (BELT DRIVE) (cont)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
|                  | 1.0                               |      | 1.1  |      | 1.2  |      | 1.4  |      | 1.6  |      | 1.8  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1200             | 999                               | 0.66 | 1018 | 0.67 | 1036 | 0.68 | 1073 | 0.71 | 1109 | 0.75 | 1138 | 0.79 |
| 1300             | 1025                              | 0.74 | 1058 | 0.79 | 1090 | 0.84 | 1121 | 0.87 | 1159 | 0.90 | 1193 | 0.95 |
| 1400             | 1042                              | 0.81 | 1080 | 0.88 | 1118 | 0.95 | 1175 | 1.06 | 1206 | 1.09 | 1244 | 1.12 |
| 1500             | 1060                              | 0.88 | 1098 | 0.96 | 1136 | 1.04 | 1205 | 1.19 | 1258 | 1.30 | 1289 | 1.34 |
| 1600             | 1080                              | 0.95 | 1117 | 1.04 | 1153 | 1.12 | 1224 | 1.29 | 1287 | 1.45 | 1337 | 1.56 |
| 1700             | 1101                              | 1.03 | 1137 | 1.12 | 1172 | 1.20 | 1241 | 1.38 | 1307 | 1.56 | 1366 | 1.73 |
| 1800             | 1122                              | 1.11 | 1157 | 1.20 | 1192 | 1.29 | 1258 | 1.48 | 1323 | 1.67 | 1385 | 1.86 |
| 1900             | 1143                              | 1.21 | 1179 | 1.30 | 1214 | 1.39 | 1279 | 1.58 | 1341 | 1.78 | 1402 | 1.98 |
| 2000             | 1165                              | 1.31 | 1200 | 1.40 | 1235 | 1.49 | 1300 | 1.69 | 1361 | 1.90 | 1419 | 2.10 |

**551B048 (4 TONS) — HIGH-STATIC MOTOR (BELT DRIVE)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |     |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|-----|------|------|------|------|------|------|------|
|                  | 0.2                               |      | 0.4 |      | 0.6  |      | 0.8  |      | 1.0  |      |
|                  | Rpm                               | Bhp  | Rpm | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1200             | 590                               | 0.20 | 723 | 0.30 | 828  | 0.42 | 924  | 0.55 | 999  | 0.66 |
| 1300             | 615                               | 0.23 | 744 | 0.35 | 849  | 0.47 | 940  | 0.60 | 1025 | 0.74 |
| 1400             | 642                               | 0.27 | 766 | 0.39 | 870  | 0.52 | 959  | 0.66 | 1042 | 0.81 |
| 1500             | 670                               | 0.31 | 788 | 0.44 | 892  | 0.58 | 980  | 0.72 | 1060 | 0.88 |
| 1600             | 699                               | 0.36 | 811 | 0.49 | 913  | 0.64 | 1001 | 0.79 | 1080 | 0.95 |
| 1700             | 728                               | 0.42 | 836 | 0.55 | 935  | 0.71 | 1023 | 0.86 | 1101 | 1.03 |
| 1800             | 759                               | 0.48 | 860 | 0.62 | 957  | 0.78 | 1044 | 0.94 | 1122 | 1.11 |
| 1900             | 790                               | 0.55 | 886 | 0.69 | 980  | 0.86 | 1066 | 1.03 | 1143 | 1.21 |
| 2000             | 836                               | 0.62 | 913 | 0.77 | 1004 | 0.94 | 1088 | 1.12 | 1165 | 1.31 |

**551B048 (4 TONS) — HIGH-STATIC MOTOR (BELT DRIVE) (cont)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                  | 1.2                               |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1200             | 1036                              | 0.68 | 1073 | 0.71 | 1109 | 0.75 | 1138 | 0.79 | 1162 | 0.84 |
| 1300             | 1090                              | 0.84 | 1121 | 0.87 | 1159 | 0.90 | 1193 | 0.95 | 1218 | 1.01 |
| 1400             | 1118                              | 0.95 | 1175 | 1.06 | 1206 | 1.09 | 1244 | 1.12 | 1270 | 1.19 |
| 1500             | 1136                              | 1.04 | 1205 | 1.19 | 1258 | 1.30 | 1289 | 1.34 | 1316 | 1.43 |
| 1600             | 1153                              | 1.12 | 1224 | 1.29 | 1287 | 1.45 | 1337 | 1.56 | 1365 | 1.66 |
| 1700             | 1172                              | 1.20 | 1241 | 1.38 | 1307 | 1.56 | 1366 | 1.73 | 1395 | 1.84 |
| 1800             | 1192                              | 1.29 | 1258 | 1.48 | 1323 | 1.67 | 1385 | 1.86 | 1414 | 1.98 |
| 1900             | 1214                              | 1.39 | 1279 | 1.58 | 1341 | 1.78 | 1402 | 1.98 | 1432 | 2.11 |
| 2000             | 1235                              | 1.49 | 1300 | 1.69 | 1361 | 1.90 | 1419 | 2.10 | 1449 | 2.24 |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

#### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 6.)
- indicates field-supplied motor and drive are required.
- Maximum continuous bhp is 1.20 for standard motors; 2.40 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan

motors up to the ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- Motor drive range: 840 to 1185 rpm for standard motors; 1075 to 1455 rpm for high-static motors. All other rpms require field-supplied drive.
- Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — HORIZONTAL DISCHARGE UNITS (cont)

| 551B060 (5 TONS) STANDARD MOTOR (BELT DRIVE) — SINGLE-PHASE UNITS |                                   |      |      |      |      |      |      |      |      |      |
|-------------------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                                  | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|                                                                   | 0.1                               |      | 0.2  |      | 0.4  |      | 0.6  |      | 0.8  |      |
|                                                                   | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500                                                              | 665                               | 0.31 | 729  | 0.35 | 843  | 0.47 | 940  | 0.60 | 1026 | 0.74 |
| 1600                                                              | 703                               | 0.36 | 763  | 0.40 | 872  | 0.53 | 965  | 0.66 | 1049 | 0.81 |
| 1700                                                              | 741                               | 0.40 | 801  | 0.47 | 902  | 0.60 | 993  | 0.75 | 1077 | 0.89 |
| 1800                                                              | 765                               | 0.45 | 821  | 0.51 | 923  | 0.65 | 1019 | 0.81 | 1099 | 0.96 |
| 1900                                                              | 802                               | 0.45 | 854  | 0.58 | 953  | 0.73 | 1046 | 0.90 | 1126 | 1.06 |
| 2000                                                              | 840                               | 0.60 | 888  | 0.66 | 984  | 0.82 | 1073 | 0.99 | 1154 | 1.16 |
| 2100                                                              | 878                               | 0.69 | 923  | 0.75 | 1015 | 0.91 | 1101 | 1.08 | 1182 | 1.27 |
| 2200                                                              | 916                               | 0.78 | 958  | 0.85 | 1046 | 1.01 | 1129 | 1.19 | 1209 | 1.39 |
| 2300                                                              | 954                               | 0.89 | 993  | 0.96 | 1079 | 1.13 | 1160 | 1.31 | 1237 | 1.51 |
| 2400                                                              | 993                               | 1.00 | 1029 | 1.07 | 1112 | 1.25 | 1190 | 1.43 | 1264 | 1.63 |
| 2500                                                              | 1031                              | 1.13 | 1066 | 1.20 | 1145 | 1.39 | 1220 | 1.57 | 1292 | 1.77 |

| 551B060 (5 TONS) STANDARD MOTOR (BELT DRIVE) — SINGLE-PHASE UNITS (cont) |                                   |      |      |      |      |      |      |      |
|--------------------------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                                         | External Static Pressure (in. wg) |      |      |      |      |      |      |      |
|                                                                          | 1.0                               |      | 1.2  |      | 1.4  |      | 1.6  |      |
|                                                                          | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500                                                                     | 1108                              | 0.89 | 1187 | 1.06 | 1202 | 1.18 | 1079 | 1.10 |
| 1600                                                                     | 1130                              | 0.97 | 1206 | 1.14 | 1275 | 1.32 | 1281 | 1.44 |
| 1700                                                                     | 1152                              | 1.05 | 1226 | 1.23 | 1298 | 1.41 | 1359 | 1.60 |
| 1800                                                                     | 1178                              | 1.14 | 1249 | 1.32 | 1316 | 1.52 | 1382 | 1.72 |
| 1900                                                                     | 1201                              | 1.23 | 1274 | 1.43 | 1338 | 1.62 | 1402 | 1.83 |
| 2000                                                                     | 1226                              | 1.33 | 1297 | 1.53 | 1363 | 1.73 | 1424 | 1.94 |
| 2100                                                                     | 1252                              | 1.45 | 1320 | 1.64 | 1388 | 1.85 | 1448 | 2.07 |
| 2200                                                                     | 1280                              | 1.58 | 1345 | 1.77 | 1410 | 1.97 | 1473 | 2.20 |
| 2300                                                                     | 1309                              | 1.71 | 1372 | 1.91 | 1434 | 2.11 | 1496 | 2.34 |
| 2400                                                                     | 1336                              | 1.85 | 1400 | 2.06 | 1459 | 2.26 | 1519 | 2.48 |
| 2500                                                                     | 1363                              | 2.00 | 1428 | 2.22 | 1486 | 2.43 | 1543 | 2.65 |

| 551B060 (5 TONS) STANDARD MOTOR (BELT DRIVE) — THREE-PHASE UNITS |                                   |      |      |      |      |      |      |      |      |      |
|------------------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                                 | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|                                                                  | 0.1                               |      | 0.2  |      | 0.4  |      | 0.6  |      | 0.8  |      |
|                                                                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500                                                             | 665                               | 0.31 | 729  | 0.35 | 843  | 0.47 | 940  | 0.60 | 1026 | 0.74 |
| 1600                                                             | 703                               | 0.36 | 763  | 0.40 | 872  | 0.53 | 965  | 0.66 | 1049 | 0.81 |
| 1700                                                             | 741                               | 0.40 | 801  | 0.47 | 902  | 0.60 | 993  | 0.75 | 1077 | 0.89 |
| 1800                                                             | 765                               | 0.45 | 821  | 0.51 | 923  | 0.65 | 1019 | 0.81 | 1099 | 0.96 |
| 1900                                                             | 802                               | 0.45 | 854  | 0.58 | 953  | 0.73 | 1046 | 0.90 | 1126 | 1.06 |
| 2000                                                             | 840                               | 0.60 | 888  | 0.66 | 984  | 0.82 | 1073 | 0.99 | 1154 | 1.16 |
| 2100                                                             | 878                               | 0.69 | 923  | 0.75 | 1015 | 0.91 | 1101 | 1.08 | 1182 | 1.27 |
| 2200                                                             | 916                               | 0.78 | 958  | 0.85 | 1046 | 1.01 | 1129 | 1.19 | 1209 | 1.39 |
| 2300                                                             | 954                               | 0.89 | 993  | 0.96 | 1079 | 1.13 | 1160 | 1.31 | 1237 | 1.51 |
| 2400                                                             | 993                               | 1.00 | 1029 | 1.07 | 1112 | 1.25 | 1190 | 1.43 | 1264 | 1.63 |
| 2500                                                             | 1031                              | 1.13 | 1066 | 1.20 | 1145 | 1.39 | 1220 | 1.57 | 1292 | 1.77 |

| 551B060 (5 TONS) STANDARD MOTOR (BELT DRIVE) — THREE-PHASE UNITS (cont) |                                   |      |      |      |      |      |      |      |
|-------------------------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                                        | External Static Pressure (in. wg) |      |      |      |      |      |      |      |
|                                                                         | 1.0                               |      | 1.2  |      | 1.4  |      | 1.6  |      |
|                                                                         | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500                                                                    | 1108                              | 0.89 | 1187 | 1.06 | 1202 | 1.18 | 1079 | 1.10 |
| 1600                                                                    | 1130                              | 0.97 | 1206 | 1.14 | 1275 | 1.32 | 1281 | 1.44 |
| 1700                                                                    | 1152                              | 1.05 | 1226 | 1.23 | 1298 | 1.41 | 1359 | 1.60 |
| 1800                                                                    | 1178                              | 1.14 | 1249 | 1.32 | 1316 | 1.52 | 1382 | 1.72 |
| 1900                                                                    | 1201                              | 1.23 | 1274 | 1.43 | 1338 | 1.62 | 1402 | 1.83 |
| 2000                                                                    | 1226                              | 1.33 | 1297 | 1.53 | 1363 | 1.73 | 1424 | 1.94 |
| 2100                                                                    | 1252                              | 1.45 | 1320 | 1.64 | 1388 | 1.85 | 1448 | 2.07 |
| 2200                                                                    | 1280                              | 1.58 | 1345 | 1.77 | 1410 | 1.97 | 1473 | 2.20 |
| 2300                                                                    | 1309                              | 1.71 | 1372 | 1.91 | 1434 | 2.11 | 1496 | 2.34 |
| 2400                                                                    | 1336                              | 1.85 | 1400 | 2.06 | 1459 | 2.26 | 1519 | 2.48 |
| 2500                                                                    | 1363                              | 2.00 | 1428 | 2.22 | 1486 | 2.43 | 1543 | 2.65 |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

#### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 6.)
- Field-supplied** indicates field-supplied motor and drive are required.
- Maximum continuous bhp is 1.80 for single-phase standard motors; 2.40 for 3-phase standard motors; and 2.90 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan motors up to the ratings

shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- Motor drive range: 1020 to 1460 rpm for single-phase standard motors; 1120 to 1585 for 3-phase standard motors; and 1300 to 1685 rpm for high-static motors. All other rpms require field-supplied drive.
- Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — HORIZONTAL DISCHARGE UNITS (cont)

**551B060 (5 TONS) HIGH-STATIC MOTOR (BELT DRIVE)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                  | 0.2                               |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500             | 722                               | 0.33 | 840  | 0.46 | 937  | 0.59 | 1027 | 0.74 | 1108 | 0.90 |
| 1600             | 754                               | 0.38 | 867  | 0.52 | 963  | 0.65 | 1052 | 0.81 | 1130 | 0.97 |
| 1700             | 787                               | 0.44 | 895  | 0.58 | 991  | 0.73 | 1075 | 0.88 | 1154 | 1.06 |
| 1800             | 821                               | 0.51 | 923  | 0.65 | 1019 | 0.81 | 1099 | 0.96 | 1178 | 1.14 |
| 1900             | 854                               | 0.58 | 953  | 0.73 | 1046 | 0.90 | 1126 | 1.06 | 1201 | 1.23 |
| 2000             | 900                               | 0.66 | 984  | 0.82 | 1073 | 0.99 | 1154 | 1.16 | 1226 | 1.33 |
| 2100             | 923                               | 0.75 | 1015 | 0.91 | 1101 | 1.08 | 1182 | 1.27 | 1252 | 1.45 |
| 2200             | 958                               | 0.85 | 1046 | 1.01 | 1129 | 1.19 | 1209 | 1.39 | 1280 | 1.58 |
| 2300             | 993                               | 0.96 | 1079 | 1.13 | 1160 | 1.31 | 1237 | 1.51 | 1309 | 1.71 |
| 2400             | 1029                              | 1.07 | 1112 | 1.25 | 1190 | 1.43 | 1264 | 1.63 | 1339 | 1.80 |
| 2500             | 1066                              | 1.20 | 1145 | 1.39 | 1220 | 1.57 | 1292 | 1.77 | 1363 | 2.00 |

**551B060 (5 TONS) HIGH-STATIC MOTOR (BELT DRIVE) (cont)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                  | 1.2                               |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1500             | 1186                              | 1.08 | 1263 | 1.30 | 1343 | 1.58 | 1431 | 1.79 | 1480 | 1.98 |
| 1600             | 1205                              | 1.15 | 1278 | 1.35 | 1350 | 1.61 | 1424 | 1.80 | 1473 | 1.99 |
| 1700             | 1228                              | 1.23 | 1296 | 1.42 | 1364 | 1.64 | 1432 | 1.89 | 1481 | 2.09 |
| 1800             | 1249                              | 1.32 | 1316 | 1.52 | 1382 | 1.72 | 1447 | 1.95 | 1497 | 2.16 |
| 1900             | 1274                              | 1.43 | 1338 | 1.62 | 1402 | 1.80 | 1464 | 2.05 | 1514 | 2.27 |
| 2000             | 1297                              | 1.53 | 1363 | 1.73 | 1424 | 1.94 | 1484 | 2.16 | 1535 | 2.39 |
| 2100             | 1320                              | 1.64 | 1388 | 1.80 | 1448 | 2.07 | 1505 | 2.29 | 1557 | 2.53 |
| 2200             | 1345                              | 1.77 | 1410 | 1.97 | 1473 | 2.20 | 1529 | 2.43 | 1581 | 2.69 |
| 2300             | 1372                              | 1.91 | 1434 | 2.11 | 1496 | 2.34 | 1554 | 2.58 | 1607 | 2.85 |
| 2400             | 1400                              | 2.06 | 1459 | 2.26 | 1519 | 2.48 | 1578 | 2.76 | 1632 | 3.05 |
| 2500             | 1428                              | 2.22 | 1486 | 2.43 | 1543 | 2.65 | 1600 | 2.89 | 1655 | 3.20 |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

#### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 6.)
-  indicates field-supplied motor and drive are required.
- Maximum continuous bhp is 1.80 for single-phase standard motors; 2.40 for 3-phase standard motors; and 2.90 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan motors up to the ratings

shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- Motor drive range: 1020 to 1460 rpm for single-phase standard motors; 1120 to 1585 for 3-phase standard motors; and 1300 to 1685 rpm for high-static motors. All other rpms require field-supplied drive.
- Interpolation is permissible. Do not extrapolate.

# PERFORMANCE DATA (cont)

## FAN PERFORMANCE — HORIZONTAL DISCHARGE UNITS (cont)

| 551B072 (6 TONS) STANDARD MOTOR (BELT DRIVE) |                                   |      |      |      |      |      |      |      |      |      |
|----------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                             | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|                                              | 0.1                               |      | 0.2  |      | 0.4  |      | 0.6  |      | 0.8  |      |
|                                              | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1800                                         | 765                               | 0.45 | 821  | 0.51 | 923  | 0.65 | 1019 | 0.81 | 1099 | 0.96 |
| 1900                                         | 802                               | 0.45 | 854  | 0.58 | 953  | 0.73 | 1046 | 0.90 | 1126 | 1.06 |
| 2000                                         | 840                               | 0.60 | 888  | 0.66 | 984  | 0.82 | 1073 | 0.99 | 1154 | 1.16 |
| 2100                                         | 878                               | 0.69 | 923  | 0.75 | 1015 | 0.91 | 1101 | 1.08 | 1182 | 1.27 |
| 2200                                         | 916                               | 0.78 | 958  | 0.85 | 1046 | 1.01 | 1129 | 1.19 | 1209 | 1.39 |
| 2300                                         | 954                               | 0.89 | 993  | 0.96 | 1079 | 1.13 | 1160 | 1.31 | 1237 | 1.51 |
| 2400                                         | 993                               | 1.00 | 1029 | 1.07 | 1112 | 1.25 | 1190 | 1.43 | 1264 | 1.63 |
| 2500                                         | 1031                              | 1.13 | 1066 | 1.20 | 1145 | 1.39 | 1220 | 1.57 | 1292 | 1.77 |
| 2600                                         | 1070                              | 1.26 | 1103 | 1.34 | 1179 | 1.52 | 1251 | 1.71 | 1322 | 1.92 |
| 2700                                         | 1109                              | 1.41 | 1140 | 1.48 | 1212 | 1.67 | 1283 | 1.87 | 1352 | 2.09 |
| 2800                                         | 1148                              | 1.57 | 1177 | 1.64 | 1246 | 1.83 | 1316 | 2.04 | 1383 | 2.26 |
| 2900                                         | 1188                              | 1.74 | 1215 | 1.81 | 1281 | 2.00 | 1349 | 2.22 | 1413 | 2.44 |
| 3000                                         | 1227                              | 1.92 | 1253 | 2.00 | 1316 | 2.19 | 1382 | 2.42 | 1444 | 2.63 |

| 551B072 (6 TONS) STANDARD MOTOR (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |
|-----------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                    | External Static Pressure (in. wg) |      |      |      |      |      |      |      |
|                                                     | 1.0                               |      | 1.2  |      | 1.4  |      | 1.6  |      |
|                                                     | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1800                                                | 1178                              | 1.14 | 1249 | 1.32 | 1316 | 1.52 | 1382 | 1.72 |
| 1900                                                | 1201                              | 1.23 | 1274 | 1.43 | 1338 | 1.62 | 1402 | 1.83 |
| 2000                                                | 1226                              | 1.33 | 1297 | 1.53 | 1363 | 1.73 | 1424 | 1.94 |
| 2100                                                | 1252                              | 1.45 | 1320 | 1.64 | 1388 | 1.85 | 1448 | 2.07 |
| 2200                                                | 1280                              | 1.58 | 1345 | 1.77 | 1410 | 1.97 | 1473 | 2.20 |
| 2300                                                | 1309                              | 1.71 | 1372 | 1.91 | 1434 | 2.11 | 1496 | 2.34 |
| 2400                                                | 1336                              | 1.85 | 1400 | 2.06 | 1459 | 2.26 | 1519 | 2.48 |
| 2500                                                | 1363                              | 2.00 | 1428 | 2.22 | 1486 | 2.43 | 1543 | 2.65 |
| 2600                                                | 1390                              | 2.15 | 1456 | 2.38 | 1514 | 2.61 | 1569 | 2.83 |
| 2700                                                | 1418                              | 2.31 | 1483 | 2.56 | 1543 | 2.80 | —    | —    |
| 2800                                                | 1446                              | 2.48 | 1510 | 2.73 | —    | —    | —    | —    |
| 2900                                                | 1476                              | 2.67 | 1537 | 2.92 | —    | —    | —    | —    |
| 3000                                                | 1506                              | 2.88 | —    | —    | —    | —    | —    | —    |

| 551B072 (6 TONS) HIGH-STATIC MOTOR (BELT DRIVE) |                                   |      |      |      |      |      |      |      |      |      |
|-------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|                                                 | 0.2                               |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|                                                 | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1800                                            | 821                               | 0.51 | 923  | 0.65 | 1019 | 0.81 | 1099 | 0.96 | 1178 | 1.14 |
| 1900                                            | 854                               | 0.58 | 953  | 0.73 | 1046 | 0.90 | 1126 | 1.06 | 1201 | 1.23 |
| 2000                                            | 888                               | 0.66 | 984  | 0.82 | 1073 | 0.99 | 1154 | 1.16 | 1226 | 1.33 |
| 2100                                            | 923                               | 0.75 | 1015 | 0.91 | 1101 | 1.08 | 1182 | 1.27 | 1252 | 1.45 |
| 2200                                            | 958                               | 0.85 | 1046 | 1.01 | 1129 | 1.19 | 1209 | 1.39 | 1280 | 1.58 |
| 2300                                            | 993                               | 0.96 | 1079 | 1.13 | 1160 | 1.31 | 1237 | 1.51 | 1309 | 1.71 |
| 2400                                            | 1029                              | 1.07 | 1112 | 1.25 | 1190 | 1.43 | 1264 | 1.63 | 1336 | 1.85 |
| 2500                                            | 1066                              | 1.20 | 1145 | 1.39 | 1220 | 1.57 | 1292 | 1.77 | 1363 | 2.00 |
| 2600                                            | 1103                              | 1.34 | 1179 | 1.52 | 1251 | 1.71 | 1322 | 1.92 | 1390 | 2.15 |
| 2700                                            | 1140                              | 1.48 | 1212 | 1.67 | 1283 | 1.87 | 1352 | 2.09 | 1418 | 2.31 |
| 2800                                            | 1177                              | 1.64 | 1246 | 1.83 | 1316 | 2.04 | 1383 | 2.26 | 1446 | 2.48 |
| 2900                                            | 1215                              | 1.81 | 1281 | 2.00 | 1349 | 2.22 | 1413 | 2.44 | 1476 | 2.67 |
| 3000                                            | 1253                              | 2.00 | 1316 | 2.19 | 1382 | 2.42 | 1444 | 2.63 | 1506 | 2.88 |

| 551B072 (6 TONS) HIGH-STATIC MOTOR (BELT DRIVE) (cont) |                                   |      |      |      |      |      |      |      |      |      |
|--------------------------------------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                       | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|                                                        | 1.2                               |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                                                        | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 1800                                                   | 1249                              | 1.32 | 1316 | 1.52 | 1382 | 1.72 | 1427 | 1.89 | 1468 | 2.06 |
| 1900                                                   | 1274                              | 1.43 | 1338 | 1.62 | 1402 | 1.83 | 1447 | 2.01 | 1489 | 2.19 |
| 2000                                                   | 1297                              | 1.53 | 1363 | 1.73 | 1424 | 1.94 | 1470 | 2.13 | 1512 | 2.32 |
| 2100                                                   | 1320                              | 1.64 | 1388 | 1.85 | 1448 | 2.07 | 1495 | 2.28 | 1538 | 2.48 |
| 2200                                                   | 1345                              | 1.77 | 1410 | 1.97 | 1473 | 2.20 | 1519 | 2.42 | 1564 | 2.64 |
| 2300                                                   | 1372                              | 1.91 | 1434 | 2.11 | 1496 | 2.34 | 1544 | 2.57 | 1589 | 2.80 |
| 2400                                                   | 1400                              | 2.06 | 1459 | 2.26 | 1519 | 2.48 | 1568 | 2.73 | 1613 | 2.97 |
| 2500                                                   | 1428                              | 2.22 | 1486 | 2.43 | 1543 | 2.65 | 1593 | 2.92 | 1639 | 3.17 |
| 2600                                                   | 1456                              | 2.38 | 1514 | 2.61 | 1569 | 2.83 | 1620 | 3.11 | 1666 | 3.39 |
| 2700                                                   | 1483                              | 2.56 | 1543 | 2.80 | 1600 | 3.12 | 1651 | 3.43 | 1699 | 3.74 |
| 2800                                                   | 1510                              | 2.73 | 1574 | 3.09 | 1632 | 3.45 | 1685 | 3.79 | 1733 | 4.13 |
| 2900                                                   | 1537                              | 2.92 | 1602 | 3.31 | 1661 | 3.69 | 1715 | 4.06 | 1764 | 4.42 |
| 3000                                                   | 1582                              | 3.34 | 1649 | 3.78 | 1710 | 4.21 | 1765 | 4.64 | —    | —    |

### LEGEND

Bhp — Brake Horsepower Input to Fan  
FIOF — Factory-Installed Option

### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 6.)
- indicates field-supplied motor and drive are required.
- Maximum continuous bhp is 2.40 for standard motors; 2.90 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan motors up to the ratings shown will not result in nuisance tripping or

premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- Motor drive range: 1120 to 1585 rpm for standard motors; 1300 to 1685 rpm for high-static motors. All other rpms require field-supplied drive.
- Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — HORIZONTAL DISCHARGE UNITS (cont)

**551B090 (7½ TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |     |      |     |      |     |      |     |      |
|------------------|-----------------------------------|------|-----|------|-----|------|-----|------|-----|------|
|                  | 0.2                               |      | 0.4 |      | 0.6 |      | 0.8 |      | 1.0 |      |
|                  | Rpm                               | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  |
| 2250             | 465                               | 0.43 | 554 | 0.64 | 630 | 0.86 | 695 | 1.09 | 757 | 1.34 |
| 2300             | 471                               | 0.45 | 559 | 0.66 | 635 | 0.89 | 699 | 1.12 | 760 | 1.37 |
| 2400             | 482                               | 0.50 | 569 | 0.71 | 645 | 0.95 | 708 | 1.18 | 768 | 1.44 |
| 2500             | 494                               | 0.54 | 581 | 0.76 | 654 | 1.01 | 717 | 1.25 | 776 | 1.51 |
| 2550             | 501                               | 0.57 | 587 | 0.79 | 659 | 1.05 | 722 | 1.29 | 780 | 1.55 |
| 2660             | 507                               | 0.59 | 592 | 0.82 | 663 | 1.08 | 727 | 1.32 | 784 | 1.58 |
| 2700             | 520                               | 0.65 | 604 | 0.89 | 672 | 1.14 | 737 | 1.40 | 793 | 1.66 |
| 2800             | 533                               | 0.71 | 615 | 0.95 | 683 | 1.20 | 747 | 1.49 | 802 | 1.75 |
| 2900             | 546                               | 0.77 | 626 | 1.02 | 693 | 1.27 | 756 | 1.57 | 813 | 1.84 |
| 3000             | 559                               | 0.83 | 637 | 1.09 | 704 | 1.35 | 765 | 1.66 | 823 | 1.94 |
| 3100             | 572                               | 0.90 | 648 | 1.17 | 715 | 1.43 | 775 | 1.74 | 832 | 2.05 |
| 3200             | 585                               | 0.96 | 660 | 1.24 | 727 | 1.52 | 785 | 1.83 | 841 | 2.15 |
| 3300             | 598                               | 1.03 | 671 | 1.32 | 739 | 1.62 | 795 | 1.91 | 851 | 2.26 |
| 3400             | 610                               | 1.10 | 682 | 1.41 | 750 | 1.72 | 806 | 2.01 | 860 | 2.36 |
| 3500             | 623                               | 1.17 | 694 | 1.50 | 761 | 1.82 | 817 | 2.11 | 870 | 2.47 |
| 3600             | 636                               | 1.25 | 707 | 1.60 | 772 | 1.93 | 828 | 2.23 | 880 | 2.57 |
| 3700             | 649                               | 1.33 | 720 | 1.71 | 783 | 2.03 | 840 | 2.35 | 890 | 2.69 |
| 3750             | 655                               | 1.37 | 727 | 1.77 | 789 | 2.09 | 846 | 2.42 | 896 | 2.75 |

**551B090 (7½ TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE) (cont)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |     |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|-----|------|------|------|------|------|------|------|
|                  | 1.2                               |      | 1.4 |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                  | Rpm                               | Bhp  | Rpm | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 2250             | 810                               | 1.62 | 850 | 1.91 | 873  | 2.20 | 863  | 2.50 | 855  | 2.78 |
| 2300             | 816                               | 1.65 | 859 | 1.94 | 888  | 2.24 | 897  | 2.55 | 887  | 2.85 |
| 2400             | 824                               | 1.72 | 872 | 2.01 | 909  | 2.32 | 931  | 2.64 | 935  | 2.96 |
| 2500             | 832                               | 1.79 | 882 | 2.09 | 925  | 2.40 | 955  | 2.72 | 972  | 3.06 |
| 2550             | 836                               | 1.83 | 887 | 2.13 | 931  | 2.45 | 964  | 2.77 | 986  | 3.11 |
| 2660             | 839                               | 1.87 | 891 | 2.17 | 936  | 2.49 | 973  | 2.82 | 999  | 3.16 |
| 2700             | 846                               | 1.95 | 898 | 2.26 | 946  | 2.58 | 987  | 2.91 | 1019 | 3.26 |
| 2800             | 855                               | 2.04 | 906 | 2.35 | 954  | 2.67 | 997  | 3.01 | 1034 | 3.36 |
| 2900             | 863                               | 2.13 | 913 | 2.44 | 961  | 2.77 | 1006 | 3.12 | —    | —    |
| 3000             | 872                               | 2.22 | 921 | 2.54 | 969  | 2.88 | 1014 | 3.22 | —    | —    |
| 3100             | 882                               | 2.33 | 930 | 2.65 | 976  | 2.99 | 1021 | 3.34 | —    | —    |
| 3200             | 892                               | 2.45 | 939 | 2.76 | 984  | 3.10 | —    | —    | —    | —    |
| 3300             | 902                               | 2.57 | 948 | 2.88 | 993  | 3.21 | —    | —    | —    | —    |
| 3400             | 912                               | 2.69 | 958 | 3.01 | 1002 | 3.34 | —    | —    | —    | —    |
| 3500             | 921                               | 2.82 | 968 | 3.15 | —    | —    | —    | —    | —    | —    |
| 3600             | 930                               | 2.95 | 978 | 3.29 | —    | —    | —    | —    | —    | —    |
| 3700             | 940                               | 3.07 | —   | —    | —    | —    | —    | —    | —    | —    |
| 3750             | 945                               | 3.14 | —   | —    | —    | —    | —    | —    | —    | —    |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

#### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 6.)
- indicates a high-static motor and drive are required.
- Maximum continuous bhp is 2.90 for standard motors; 4.20 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan

motors up to the ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- Standard motor drive range: 840 to 1085 rpm. High-static motor drive range: 860 to 1060 rpm. All other rpms require field-supplied drive.
- Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — HORIZONTAL DISCHARGE UNITS (cont)

| 551B102 (8½ TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE) |                                   |      |     |      |     |      |     |      |     |      |
|-----------------------------------------------------------------|-----------------------------------|------|-----|------|-----|------|-----|------|-----|------|
| Airflow<br>(Cfm)                                                | External Static Pressure (in. wg) |      |     |      |     |      |     |      |     |      |
|                                                                 | 0.2                               |      | 0.4 |      | 0.6 |      | 0.8 |      | 1.0 |      |
|                                                                 | Rpm                               | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  |
| 2550                                                            | 501                               | 0.57 | 587 | 0.79 | 659 | 1.05 | 722 | 1.29 | 780 | 1.55 |
| 2660                                                            | 507                               | 0.59 | 592 | 0.82 | 663 | 1.08 | 727 | 1.32 | 784 | 1.58 |
| 2700                                                            | 520                               | 0.65 | 604 | 0.89 | 672 | 1.14 | 737 | 1.40 | 793 | 1.66 |
| 2800                                                            | 533                               | 0.71 | 615 | 0.95 | 683 | 1.20 | 747 | 1.49 | 802 | 1.75 |
| 2900                                                            | 546                               | 0.77 | 626 | 1.02 | 693 | 1.27 | 756 | 1.57 | 813 | 1.84 |
| 3000                                                            | 559                               | 0.83 | 637 | 1.09 | 704 | 1.35 | 765 | 1.66 | 823 | 1.94 |
| 3100                                                            | 572                               | 0.90 | 648 | 1.17 | 715 | 1.43 | 775 | 1.74 | 832 | 2.05 |
| 3200                                                            | 585                               | 0.96 | 660 | 1.24 | 727 | 1.52 | 785 | 1.83 | 841 | 2.15 |
| 3300                                                            | 598                               | 1.03 | 671 | 1.32 | 739 | 1.62 | 795 | 1.91 | 851 | 2.26 |
| 3400                                                            | 610                               | 1.10 | 682 | 1.41 | 750 | 1.72 | 806 | 2.01 | 860 | 2.36 |
| 3500                                                            | 623                               | 1.17 | 694 | 1.50 | 761 | 1.82 | 817 | 2.11 | 870 | 2.47 |
| 3600                                                            | 636                               | 1.25 | 707 | 1.60 | 772 | 1.93 | 828 | 2.23 | 880 | 2.57 |
| 3700                                                            | 649                               | 1.33 | 720 | 1.71 | 783 | 2.03 | 840 | 2.35 | 890 | 2.69 |
| 3750                                                            | 655                               | 1.37 | 727 | 1.77 | 789 | 2.09 | 846 | 2.42 | 896 | 2.75 |
| 3800                                                            | 661                               | 1.41 | 733 | 1.82 | 795 | 2.15 | 852 | 2.48 | 901 | 2.80 |
| 3900                                                            | 674                               | 1.49 | 746 | 1.93 | 806 | 2.26 | 863 | 2.61 | 912 | 2.93 |
| 4000                                                            | 687                               | 1.57 | 759 | 2.05 | 817 | 2.38 | 874 | 2.75 | 923 | 3.08 |
| 4100                                                            | 699                               | 1.60 | 772 | 2.17 | 828 | 2.50 | 885 | 2.88 | 935 | 3.23 |
| 4200                                                            | 712                               | 1.75 | 785 | 2.30 | 840 | 2.64 | 897 | 3.03 | 947 | 3.39 |
| 4250                                                            | 719                               | 1.80 | 792 | 2.37 | 846 | 2.71 | 903 | 3.10 | —   | —    |

| 551B102 (8½ TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE) (cont) |                                   |      |     |      |      |      |      |      |      |      |
|------------------------------------------------------------------------|-----------------------------------|------|-----|------|------|------|------|------|------|------|
| Airflow<br>(Cfm)                                                       | External Static Pressure (in. wg) |      |     |      |      |      |      |      |      |      |
|                                                                        | 1.2                               |      | 1.4 |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                                                                        | Rpm                               | Bhp  | Rpm | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 2550                                                                   | 836                               | 1.83 | 887 | 2.13 | 931  | 2.45 | 964  | 2.77 | 986  | 3.11 |
| 2660                                                                   | 839                               | 1.87 | 891 | 2.17 | 936  | 2.49 | 973  | 2.82 | 999  | 3.16 |
| 2700                                                                   | 846                               | 1.95 | 898 | 2.26 | 946  | 2.58 | 987  | 2.91 | 1019 | 3.26 |
| 2800                                                                   | 855                               | 2.04 | 906 | 2.35 | 954  | 2.67 | 997  | 3.01 | 1034 | 3.36 |
| 2900                                                                   | 863                               | 2.13 | 913 | 2.44 | 961  | 2.77 | 1006 | 3.12 | —    | —    |
| 3000                                                                   | 872                               | 2.22 | 921 | 2.54 | 969  | 2.88 | 1014 | 3.22 | —    | —    |
| 3100                                                                   | 882                               | 2.33 | 930 | 2.65 | 976  | 2.99 | 1021 | 3.34 | —    | —    |
| 3200                                                                   | 892                               | 2.45 | 939 | 2.76 | 984  | 3.10 | —    | —    | —    | —    |
| 3300                                                                   | 902                               | 2.57 | 948 | 2.88 | 993  | 3.21 | —    | —    | —    | —    |
| 3400                                                                   | 912                               | 2.69 | 958 | 3.01 | 1002 | 3.34 | —    | —    | —    | —    |
| 3500                                                                   | 921                               | 2.82 | 968 | 3.15 | —    | —    | —    | —    | —    | —    |
| 3600                                                                   | 930                               | 2.95 | 978 | 3.29 | —    | —    | —    | —    | —    | —    |
| 3700                                                                   | 940                               | 3.07 | —   | —    | —    | —    | —    | —    | —    | —    |
| 3750                                                                   | 945                               | 3.14 | —   | —    | —    | —    | —    | —    | —    | —    |
| 3800                                                                   | 949                               | 3.20 | —   | —    | —    | —    | —    | —    | —    | —    |
| 3900                                                                   | 959                               | 3.33 | —   | —    | —    | —    | —    | —    | —    | —    |
| 4000                                                                   | —                                 | —    | —   | —    | —    | —    | —    | —    | —    | —    |
| 4100                                                                   | —                                 | —    | —   | —    | —    | —    | —    | —    | —    | —    |
| 4200                                                                   | —                                 | —    | —   | —    | —    | —    | —    | —    | —    | —    |
| 4250                                                                   | —                                 | —    | —   | —    | —    | —    | —    | —    | —    | —    |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

#### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 6.)
- indicates a high-static motor and drive are required.
- Maximum continuous bhp is 2.90 for standard motors; 4.20 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan

motors up to the ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- Standard motor drive range: 840 to 1085 rpm. High-static motor drive range: 860 to 1060 rpm. All other rpms require field-supplied drive.
- Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN PERFORMANCE — HORIZONTAL DISCHARGE UNITS (cont)

**551B120 (10 TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |     |      |     |      |     |      |     |      |
|------------------|-----------------------------------|------|-----|------|-----|------|-----|------|-----|------|
|                  | 0.2                               |      | 0.4 |      | 0.6 |      | 0.8 |      | 1.0 |      |
|                  | Rpm                               | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  | Rpm | Bhp  |
| 3000             | 459                               | 0.35 | 595 | 0.74 | 657 | 0.88 | 716 | 1.05 | 770 | 1.24 |
| 3100             | 478                               | 0.46 | 605 | 0.79 | 667 | 0.94 | 725 | 1.10 | 779 | 1.30 |
| 3200             | 500                               | 0.57 | 615 | 0.85 | 679 | 1.01 | 734 | 1.16 | 787 | 1.36 |
| 3300             | 519                               | 0.62 | 625 | 0.90 | 691 | 1.08 | 744 | 1.23 | 796 | 1.43 |
| 3400             | 537                               | 0.69 | 637 | 0.97 | 702 | 1.16 | 753 | 1.30 | 805 | 1.50 |
| 3500             | 561                               | 0.77 | 647 | 1.03 | 712 | 1.23 | 762 | 1.38 | 814 | 1.57 |
| 3600             | 592                               | 0.86 | 658 | 1.10 | 721 | 1.30 | 773 | 1.47 | 823 | 1.65 |
| 3700             | 607                               | 0.97 | 670 | 1.18 | 732 | 1.37 | 782 | 1.56 | 833 | 1.73 |
| 3800             | 621                               | 1.05 | 681 | 1.25 | 742 | 1.45 | 795 | 1.66 | 842 | 1.82 |
| 3900             | 636                               | 1.13 | 693 | 1.32 | 751 | 1.53 | 808 | 1.76 | 851 | 1.92 |
| 4000             | 650                               | 1.21 | 705 | 1.40 | 761 | 1.61 | 819 | 1.86 | 861 | 2.02 |
| 4100             | 665                               | 1.30 | 717 | 1.48 | 772 | 1.71 | 830 | 1.96 | 871 | 2.13 |
| 4200             | 680                               | 1.39 | 728 | 1.57 | 783 | 1.81 | 839 | 2.05 | 883 | 2.25 |
| 4300             | 696                               | 1.49 | 739 | 1.66 | 794 | 1.91 | 848 | 2.14 | 896 | 2.38 |
| 4400             | 711                               | 1.60 | 750 | 1.75 | 805 | 2.02 | 857 | 2.24 | 908 | 2.51 |
| 4500             | 727                               | 1.70 | 762 | 1.85 | 817 | 2.12 | 867 | 2.35 | 919 | 2.63 |
| 4600             | 742                               | 1.82 | 774 | 1.96 | 828 | 2.23 | 877 | 2.46 | 929 | 2.75 |
| 4700             | 758                               | 1.94 | 786 | 2.07 | 840 | 2.34 | 888 | 2.59 | 938 | 2.87 |
| 4800             | 773                               | 2.06 | 799 | 2.18 | 852 | 2.46 | 899 | 2.72 | 947 | 2.98 |
| 4900             | 789                               | 2.19 | 812 | 2.30 | 863 | 2.57 | 910 | 2.86 | 957 | 3.11 |
| 5000             | 805                               | 2.32 | 826 | 2.43 | 875 | 2.70 | 921 | 2.99 | 966 | 3.24 |

**551B120 (10 TONS) — STANDARD AND HIGH-STATIC MOTOR (BELT DRIVE) (cont)**

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                  | 1.2                               |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 3000             | <b>822</b>                        | 1.44 | 872  | 1.69 | 919  | 1.88 | 950  | 1.70 | 962  | 1.82 |
| 3100             | <b>829</b>                        | 1.50 | 882  | 1.73 | 932  | 2.00 | 965  | 1.80 | 971  | 1.95 |
| 3200             | 837                               | 1.56 | 886  | 1.78 | 943  | 2.06 | 978  | 1.91 | 984  | 2.07 |
| 3300             | 845                               | 1.63 | 892  | 1.85 | 947  | 2.10 | 988  | 2.05 | 995  | 2.20 |
| 3400             | 853                               | 1.71 | 899  | 1.93 | 951  | 2.17 | 995  | 2.17 | 1008 | 2.32 |
| 3500             | 862                               | 1.78 | 907  | 2.01 | 959  | 2.24 | 1000 | 2.33 | 1021 | 2.47 |
| 3600             | 871                               | 1.86 | 915  | 2.09 | 965  | 2.32 | 1005 | 2.46 | 1036 | 2.59 |
| 3700             | 879                               | 1.95 | 927  | 2.17 | 973  | 2.38 | 1013 | 2.57 | 1046 | 2.73 |
| 3800             | 889                               | 2.03 | 934  | 2.26 | 980  | 2.48 | 1022 | 2.69 | 1058 | 2.87 |
| 3900             | 898                               | 2.12 | 942  | 2.36 | 987  | 2.59 | 1030 | 2.81 | 1068 | 3.01 |
| 4000             | 908                               | 2.21 | 950  | 2.46 | 994  | 2.70 | 1037 | 2.92 | 1077 | 3.14 |
| 4100             | 917                               | 2.32 | 960  | 2.55 | 1001 | 2.81 | 1045 | 3.04 | 1085 | 3.21 |
| 4200             | 925                               | 2.44 | 969  | 2.65 | 1009 | 2.92 | 1051 | 3.17 | 1092 | 3.40 |
| 4300             | 935                               | 2.56 | 979  | 2.77 | 1018 | 3.03 | 1058 | 3.29 | 1100 | 3.53 |
| 4400             | 945                               | 2.68 | 988  | 2.89 | 1028 | 3.14 | 1066 | 3.41 | 1106 | 3.67 |
| 4500             | 955                               | 2.82 | 996  | 3.02 | 1037 | 3.25 | 1074 | 3.54 | 1113 | 3.81 |
| 4600             | 967                               | 2.96 | 1005 | 3.16 | 1046 | 3.38 | 1084 | 3.66 | 1121 | 3.95 |
| 4700             | 980                               | 3.11 | 1015 | 3.30 | 1056 | 3.52 | 1093 | 3.79 | 1129 | 4.09 |
| 4800             | 992                               | 3.26 | 1025 | 3.45 | 1064 | 3.67 | 1103 | 3.92 | 1137 | 4.22 |
| 4900             | 1003                              | 3.41 | 1036 | 3.61 | 1073 | 3.83 | 1112 | 4.07 | 1147 | 4.36 |
| 5000             | 1014                              | 3.56 | 1049 | 3.79 | 1083 | 4.00 | 1121 | 4.23 | 1157 | 4.50 |

#### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

#### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 6.)
- Shaded** indicates a field-supplied motor and drive are required.
- Maximum continuous bhp is 3.70 for standard motors; 5.25 for high-static motors. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan

motors up to the ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected. For additional information on motor performance, refer to Evaporator-Fan Motor Data tables on pages 42 and 43.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify.
- Standard motor drive range: 860 to 1080 rpm. High-static motor drive range: 830 to 1130 rpm. All other rpms require field-supplied drive.
- Interpolation is permissible. Do not extrapolate.

# PERFORMANCE DATA (cont)

## FAN PERFORMANCE — HORIZONTAL DISCHARGE UNITS (cont)

551B150 (12½ TONS) — STANDARD MOTOR (BELT DRIVE)

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                  | 0.2                               |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 3700             | —                                 | —    | —    | —    | —    | —    | —    | —    | —    | —    |
| 3800             | —                                 | —    | —    | —    | —    | —    | —    | —    | —    | —    |
| 3900             | —                                 | —    | —    | —    | —    | —    | —    | —    | —    | —    |
| 4000             | —                                 | —    | —    | —    | —    | —    | —    | —    | 861  | 2.02 |
| 4100             | —                                 | —    | —    | —    | —    | —    | —    | —    | 871  | 2.13 |
| 4200             | —                                 | —    | —    | —    | —    | —    | —    | —    | 883  | 2.25 |
| 4300             | —                                 | —    | —    | —    | —    | —    | —    | —    | 896  | 2.38 |
| 4400             | —                                 | —    | —    | —    | —    | —    | —    | —    | 908  | 2.51 |
| 4500             | —                                 | —    | —    | —    | —    | —    | 867  | 2.35 | 919  | 2.63 |
| 4600             | —                                 | —    | —    | —    | —    | —    | 877  | 2.46 | 929  | 2.75 |
| 4700             | —                                 | —    | —    | —    | —    | —    | 888  | 2.59 | 938  | 2.87 |
| 4800             | —                                 | —    | —    | —    | —    | —    | 899  | 2.72 | 947  | 2.98 |
| 4900             | —                                 | —    | —    | —    | 863  | 2.57 | 910  | 2.86 | 957  | 3.11 |
| 5000             | —                                 | —    | —    | —    | 875  | 2.70 | 921  | 2.99 | 966  | 3.24 |
| 5100             | —                                 | —    | —    | —    | 887  | 2.83 | 932  | 3.13 | 976  | 3.38 |
| 5200             | —                                 | —    | —    | —    | 898  | 2.96 | 943  | 3.28 | 987  | 3.53 |
| 5300             | —                                 | —    | 868  | 2.85 | 909  | 3.09 | 955  | 3.42 | 998  | 3.69 |
| 5400             | 869                               | 2.92 | 882  | 3.01 | 920  | 3.24 | 967  | 3.57 | 1009 | 3.86 |
| 5500             | 885                               | 3.09 | 897  | 3.17 | 932  | 3.38 | 978  | 3.72 | 1029 | 4.03 |
| 5600             | 901                               | 3.26 | 911  | 3.33 | 943  | 3.54 | 990  | 3.87 | 1031 | 4.20 |
| 5700             | 917                               | 3.44 | 926  | 3.50 | 956  | 3.70 | 1002 | 4.03 | 1042 | 4.38 |
| 5800             | 933                               | 3.62 | 941  | 3.68 | 968  | 3.87 | 1013 | 4.20 | 1053 | 4.56 |
| 5900             | 949                               | 3.81 | 956  | 3.87 | 981  | 4.05 | 1025 | 4.37 | 1065 | 4.74 |
| 6000             | 965                               | 4.01 | 972  | 4.06 | 995  | 4.23 | 1037 | 4.55 | 1076 | 4.92 |
| 6100             | 981                               | 4.21 | 987  | 4.26 | 1008 | 4.42 | 1042 | 4.73 | 1088 | 5.10 |
| 6200             | 997                               | 4.42 | 1002 | 4.46 | 1022 | 4.62 | 1058 | 4.91 | —    | —    |
| 6300             | 1014                              | 4.64 | 1018 | 4.68 | 1036 | 4.83 | 1070 | 5.11 | —    | —    |

551B150 (12½ TONS) — STANDARD MOTOR (BELT DRIVE) (cont)

| Airflow<br>(Cfm) | External Static Pressure (in. wg) |      |      |      |      |      |      |      |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                  | 1.2                               |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|                  | Rpm                               | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  | Rpm  | Bhp  |
| 3700             | 879                               | 1.95 | 927  | 2.17 | 973  | 2.38 | 1013 | 2.57 | 1046 | 2.73 |
| 3800             | 889                               | 2.03 | 934  | 2.26 | 980  | 2.48 | 1022 | 2.69 | 1058 | 2.87 |
| 3900             | 898                               | 2.12 | 942  | 2.36 | 987  | 2.59 | 1030 | 2.81 | 1068 | 3.01 |
| 4000             | 908                               | 2.21 | 950  | 2.46 | 994  | 2.70 | 1037 | 2.92 | 1077 | 3.14 |
| 4100             | 917                               | 2.32 | 960  | 2.55 | 1001 | 2.81 | 1045 | 3.04 | 1085 | 3.21 |
| 4200             | 925                               | 2.44 | 969  | 2.65 | 1009 | 2.92 | 1051 | 3.17 | 1092 | 3.40 |
| 4300             | 935                               | 2.56 | 979  | 2.77 | 1018 | 3.03 | 1058 | 3.29 | 1100 | 3.53 |
| 4400             | 945                               | 2.68 | 988  | 2.89 | 1028 | 3.14 | 1066 | 3.41 | 1106 | 3.67 |
| 4500             | 955                               | 2.82 | 996  | 3.02 | 1037 | 3.25 | 1074 | 3.54 | 1113 | 3.81 |
| 4600             | 967                               | 2.96 | 1005 | 3.16 | 1046 | 3.38 | 1084 | 3.66 | 1121 | 3.95 |
| 4700             | 980                               | 3.11 | 1015 | 3.30 | 1056 | 3.52 | 1093 | 3.79 | 1129 | 4.09 |
| 4800             | 992                               | 3.26 | 1025 | 3.45 | 1064 | 3.67 | 1103 | 3.92 | 1137 | 4.22 |
| 4900             | 1003                              | 3.41 | 1036 | 3.61 | 1073 | 3.83 | 1112 | 4.07 | 1147 | 4.36 |
| 5000             | 1014                              | 3.56 | 1049 | 3.79 | 1083 | 4.00 | 1121 | 4.23 | 1157 | 4.50 |
| 5100             | 1024                              | 3.71 | 1061 | 3.96 | 1093 | 4.17 | 1129 | 4.40 | 1166 | 4.66 |
| 5200             | 1033                              | 3.84 | 1073 | 4.14 | 1103 | 4.34 | 1138 | 4.58 | 1175 | 4.82 |
| 5300             | 1042                              | 3.98 | 1084 | 4.31 | 1115 | 4.53 | 1148 | 4.76 | 1184 | 5.01 |
| 5400             | 1051                              | 4.14 | 1095 | 4.49 | 1128 | 4.74 | 1158 | 4.95 | 1193 | 5.20 |
| 5500             | 1061                              | 4.30 | 1105 | 4.66 | 1140 | 4.94 | 1168 | 5.15 | —    | —    |
| 5600             | 1071                              | 4.46 | 1114 | 4.81 | 1152 | 5.14 | —    | —    | —    | —    |
| 5700             | 1081                              | 4.64 | 1123 | 4.98 | —    | —    | —    | —    | —    | —    |
| 5800             | 1092                              | 4.84 | 1132 | 5.15 | —    | —    | —    | —    | —    | —    |
| 5900             | 1103                              | 5.04 | —    | —    | —    | —    | —    | —    | —    | —    |
| 6000             | 1114                              | 5.24 | —    | —    | —    | —    | —    | —    | —    | —    |
| 6100             | —                                 | —    | —    | —    | —    | —    | —    | —    | —    | —    |
| 6200             | —                                 | —    | —    | —    | —    | —    | —    | —    | —    | —    |
| 6300             | —                                 | —    | —    | —    | —    | —    | —    | —    | —    | —    |

### LEGEND

**Bhp** — Brake Horsepower Input to Fan  
**FIOF** — Factory-Installed Option

### NOTES:

- Boldface** indicates a field-supplied drive is required. (See Note 5.)
- Maximum continuous bhp is 5.25 with standard motor. Extensive motor and electrical testing on these units ensures that the full range of the motor can be utilized with confidence. Using your fan motors up to the ratings shown

will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected.

- Values include losses for filters, unit casing, and wet coils. See page 43 for accessory/FIOF static pressure information.
- Use of a field-supplied motor may affect wire sizing. Contact Bryant representative to verify. For additional information on motor performance, refer to Evaporator-Fan Motor Data table on pages 42 and 43.
- Standard motor drive range: 900 to 1260 rpm.
- Interpolation is permissible. Do not extrapolate.

## PERFORMANCE DATA (cont)

### FAN RPM AT MOTOR PULLEY SETTING\*; STANDARD MOTOR/DRIVE

| UNIT<br>551B             | MOTOR PULLEY TURNS OPEN |      |      |       |      |       |      |       |      |       |      |       |      |
|--------------------------|-------------------------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                          | 0                       | 1/2  | 1    | 1 1/2 | 2    | 2 1/2 | 3    | 3 1/2 | 4    | 4 1/2 | 5    | 5 1/2 | 6    |
| 036                      | 1090                    | 1055 | 1025 | 990   | 960  | 925   | 890  | 860   | 825  | 795   | 760  | —     | —    |
| 048                      | 1185                    | 1150 | 1115 | 1080  | 1045 | 1015  | 980  | 945   | 910  | 875   | 840  | —     | —    |
| 060<br>(single-phase)    | 1460                    | 1425 | 1385 | 1350  | 1315 | 1275  | 1240 | 1205  | 1165 | 1130  | 1095 | 1055  | 1020 |
| 060 (3-phase)<br>and 072 | 1585                    | 1540 | 1490 | 1445  | 1400 | 1350  | 1305 | 1260  | 1210 | 1165  | 1120 | —     | —    |
| 090, 102                 | 1085                    | 1060 | 1035 | 1010  | 985  | 960   | 935  | 910   | 890  | 865   | 840  | —     | —    |
| 120                      | 1080                    | 1060 | 1035 | 1015  | 990  | 970   | 950  | 925   | 905  | 880   | 860  | —     | —    |
| 150                      | 1260                    | 1220 | 1185 | 1155  | 1130 | 1100  | 1075 | 1045  | 1015 | 990   | 960  | 930   | 900  |

\*Approximate fan rpm shown.

### FAN RPM AT MOTOR PULLEY SETTING\*; HIGH-STATIC MOTOR/DRIVE

| UNIT<br>551B | MOTOR PULLEY TURNS OPEN |      |      |       |      |       |      |       |      |       |      |       |      |
|--------------|-------------------------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|              | 0                       | 1/2  | 1    | 1 1/2 | 2    | 2 1/2 | 3    | 3 1/2 | 4    | 4 1/2 | 5    | 5 1/2 | 6    |
| 036          | 1455                    | 1423 | 1392 | 1360  | 1328 | 1297  | 1265 | 1233  | 1202 | 1170  | 1138 | 1107  | 1075 |
| 048          | 1455                    | 1423 | 1392 | 1360  | 1328 | 1297  | 1265 | 1233  | 1202 | 1170  | 1138 | 1107  | 1075 |
| 060          | 1685                    | 1589 | 1557 | 1525  | 1493 | 1460  | 1428 | 1396  | 1364 | 1332  | 1300 | —     | —    |
| 072          | 1685                    | 1589 | 1557 | 1525  | 1493 | 1460  | 1428 | 1396  | 1364 | 1332  | 1300 | —     | —    |
| 090          | 1080                    | 1025 | 1007 | 988   | 970  | 952   | 933  | 915   | 897  | 878   | 860  | —     | —    |
| 102          | 1080                    | 1025 | 1007 | 988   | 970  | 952   | 933  | 915   | 897  | 878   | 860  | —     | —    |
| 120          | 1130                    | 1112 | 1087 | 1062  | 1037 | 1212  | 987  | 962   | 937  | 912   | 887  | 862   | 830  |

\*Approximate fan rpm shown.

### EVAPORATOR-FAN MOTOR DATA — STANDARD MOTOR

| UNIT<br>551B | UNIT<br>PHASE | MAXIMUM<br>CONTINUOUS BHP* | MAXIMUM<br>OPERATING WATTS* | UNIT VOLTAGE | MAXIMUM<br>AMP DRAW |
|--------------|---------------|----------------------------|-----------------------------|--------------|---------------------|
| 036          | Single        | 1.20                       | 1000                        | 208/230      | 4.9                 |
|              | Three         | 1.20                       | 1000                        | 208/230      | 4.9                 |
|              |               |                            |                             | 460          | 2.2                 |
|              |               |                            |                             | 575          | 2.2                 |
| 048          | Single        | 1.20                       | 1000                        | 208/230      | 4.9                 |
|              | Three         | 1.20                       | 1000                        | 208/230      | 4.9                 |
|              |               |                            |                             | 460          | 2.2                 |
|              |               |                            |                             | 575          | 2.2                 |
| 060          | Single        | 1.80                       | 2120                        | 208/230      | 8.8                 |
|              | Three         | 2.40                       | 2120                        | 208/230      | 6.7                 |
|              |               |                            |                             | 460          | 3.0                 |
|              |               |                            |                             | 575          | 3.0                 |
| 072          | Three         | 2.40                       | 2120                        | 208/230      | 6.7                 |
|              |               |                            |                             | 460          | 3.0                 |
|              |               |                            |                             | 575          | 3.0                 |
| 090, 102     | Three         | 2.90                       | 2615                        | 208/230      | 8.6                 |
|              |               |                            |                             | 460          | 3.9                 |
|              |               |                            |                             | 575          | 3.9                 |
| 120          | Three         | 3.70                       | 3775                        | 208/230      | 12.2                |
|              |               |                            |                             | 460          | 5.5                 |
|              |               |                            |                             | 575          | 5.5                 |
| 150          | Three         | 5.25                       | 4400                        | 208/230      | 17.3                |
|              |               |                            |                             | 460          | 8.5                 |
|              |               |                            |                             | 575          | 8.5                 |

#### LEGEND

Bhp — Brake Horsepower

\*Extensive motor and electrical testing on these units ensures that the full horsepower and watts range of the motors can be utilized with confidence. Using your fan motors up to the ratings shown in this table will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected.

## PERFORMANCE DATA (cont)

### EVAPORATOR-FAN MOTOR DATA — HIGH-STATIC MOTORS

| UNIT<br>551B | UNIT<br>PHASE | MAXIMUM<br>CONTINUOUS BHP* | MAXIMUM<br>OPERATING WATTS* | UNIT VOLTAGE | MAXIMUM<br>AMP DRAW |
|--------------|---------------|----------------------------|-----------------------------|--------------|---------------------|
| 036          | Three         | 2.40                       | 2120                        | 208/230      | 6.7                 |
|              |               |                            |                             | 460          | 3.0                 |
|              |               |                            |                             | 575          | 3.0                 |
| 048          | Three         | 2.40                       | 2120                        | 208/230      | 6.7                 |
|              |               |                            |                             | 460          | 3.0                 |
|              |               |                            |                             | 575          | 3.0                 |
| 060          | Three         | 2.90                       | 2615                        | 208/230      | 8.6                 |
|              |               |                            |                             | 460          | 3.9                 |
|              |               |                            |                             | 575          | 3.9                 |
| 072          | Three         | 2.90                       | 2615                        | 208/230      | 8.6                 |
|              |               |                            |                             | 460          | 3.9                 |
|              |               |                            |                             | 575          | 3.9                 |
| 090, 102     | Three         | 4.20                       | 3775                        | 208/230      | 12.2                |
|              |               |                            |                             | 460          | 5.5                 |
|              |               |                            |                             | 575          | 5.5                 |
| 120          | Three         | 5.25                       | 4400                        | 208/230      | 17.3                |
|              |               |                            |                             | 460          | 8.5                 |
|              |               |                            |                             | 575          | 8.5                 |

#### LEGEND

**Bhp** — Brake Horsepower

\*Extensive motor and electrical testing on these units ensures that the full horsepower and watts range of the motors can be utilized with

confidence. Using your fan motors up to the ratings shown in this table will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected.

### ACCESSORY/FIOP ECONOMIZERS AND ELECTRIC HEATERS STATIC PRESSURE DROP (in. wg) 551B036-072

| COMPONENT            | CFM  |      |      |      |      |      |      |      |      |
|----------------------|------|------|------|------|------|------|------|------|------|
|                      | 900  | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 |
| 1 Heater Module      | 0.05 | 0.07 | 0.09 | 0.09 | 0.10 | 0.11 | 0.11 | 0.12 | 0.13 |
| 2 Heater Modules     | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 |
| Durablade Economizer | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| EconoMiSer           | 0.05 | 0.09 | 0.13 | 0.17 | 0.22 | 0.27 | 0.32 | 0.39 | 0.45 |

#### LEGEND

**FIOP** — Factory-Installed Option

### ACCESSORY/FIOP ECONOMIZERS AND ELECTRIC HEATERS STATIC PRESSURE DROP (in. wg) 551B090-150

| COMPONENT            | CFM  |      |      |       |      |      |      |      |       |
|----------------------|------|------|------|-------|------|------|------|------|-------|
|                      | 2200 | 2500 | 3000 | 3500  | 4000 | 4500 | 5000 | 5500 | 6000  |
| 1 Heater Module      | 0.02 | 0.03 | 0.05 | 0.065 | 0.08 | 0.10 | 0.12 | 0.14 | 0.155 |
| 2 Heater Modules     | 0.03 | 0.05 | 0.07 | 0.09  | 0.12 | 0.14 | 0.16 | 0.19 | 0.21  |
| Durablade Economizer | 0.02 | 0.02 | 0.03 | 0.04  | 0.05 | 0.06 | 0.07 | 0.08 | 0.09  |
| EconoMiSer           | 0.07 | 0.09 | 0.13 | 0.18  | 0.23 | 0.30 | 0.36 | —    | —     |

#### LEGEND

**FIOP** — Factory-Installed Option

### EVAPORATOR-FAN MOTOR EFFICIENCY

| MOTOR 551B | EFFICIENCY |
|------------|------------|
| 036,048    | 75         |
| 060        | 74/84*     |
| 072        | 84         |
| 090,102    | 80         |
| 120        | 85         |
| 150        | 87         |

\*Single-phase/3-phase.

**NOTE:** Convert watts to bhp using the following formula:

$$\text{bhp} = \frac{\text{watts input} \times \text{motor efficiency}}{746}$$

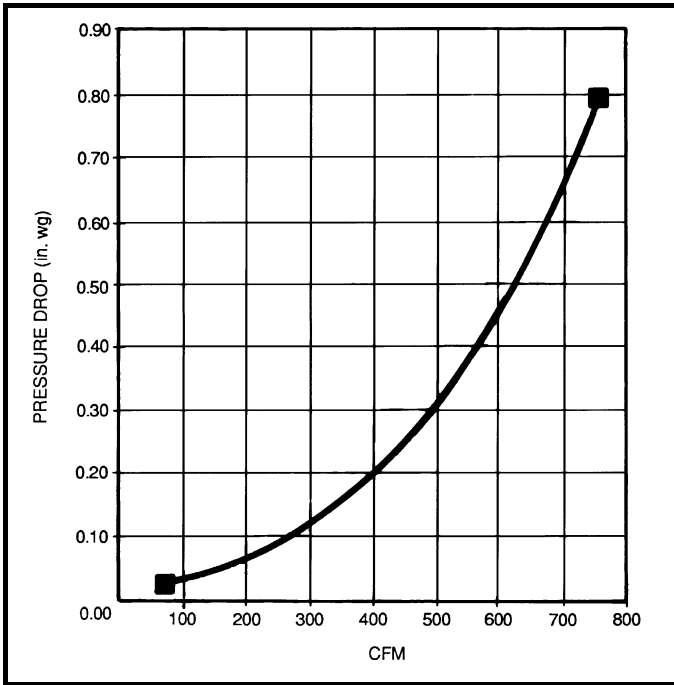
### FIOP PERFECT HUMIDITY™ DEHUMIDIFICATION PACKAGE STATIC PRESSURE DROP (in. wg)

| UNIT SIZE<br>551B | UNIT NOMINAL<br>TONS | CFM PER TON |     |     |
|-------------------|----------------------|-------------|-----|-----|
|                   |                      | 300         | 400 | 500 |
| 036               | 3                    | .04         | .07 | .09 |
| 048               | 4                    | .07         | .12 | .15 |
| 060               | 5                    | .09         | .15 | .21 |
| 072               | 6                    | .12         | .20 | .28 |
| 090               | 7 1/2                | .08         | .13 | .18 |
| 102               | 8 1/2                | .10         | .15 | .22 |
| 120               | 10                   | .08         | .13 | .18 |
| 150               | 12 1/2               | .11         | .18 | .26 |

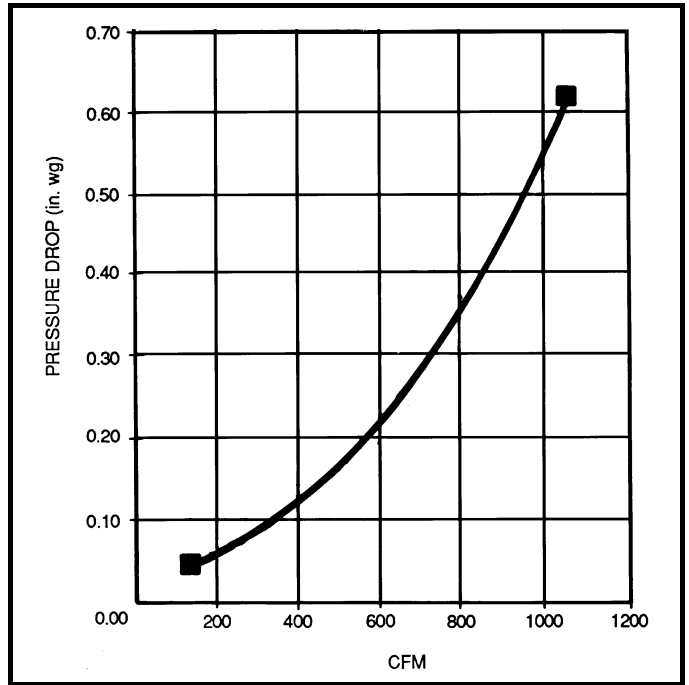
#### LEGEND

**FIOP** — Factory-Installed Option

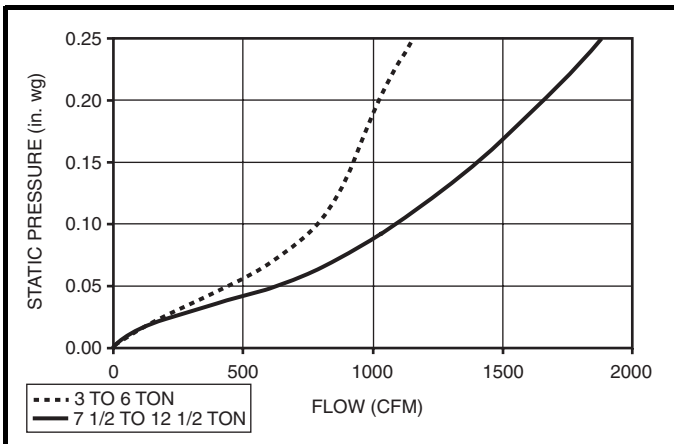
## PERFORMANCE DATA (cont)



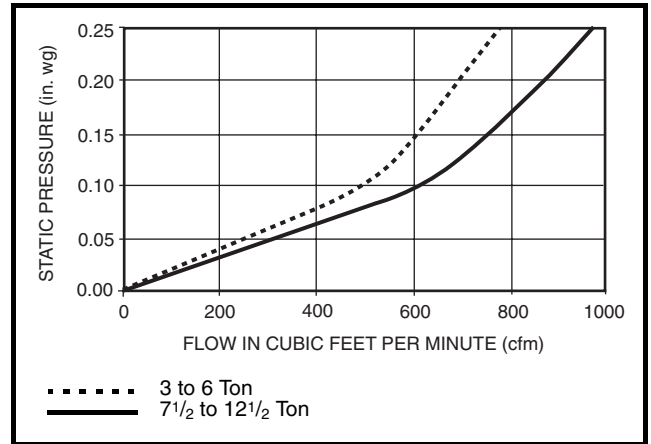
**Durablade Economizer Barometric Relief Damper Characteristics — 551B036-072**



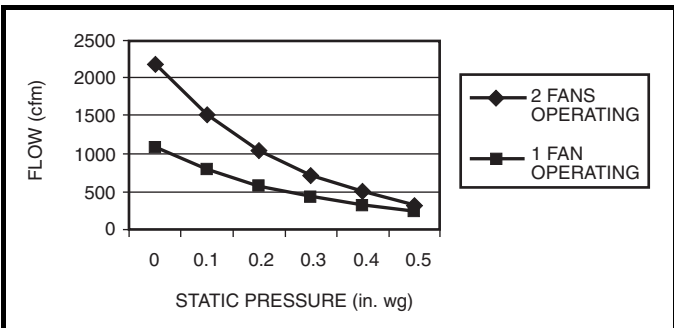
**Durablade Economizer Barometric Relief Damper Characteristics — 551B090-150**



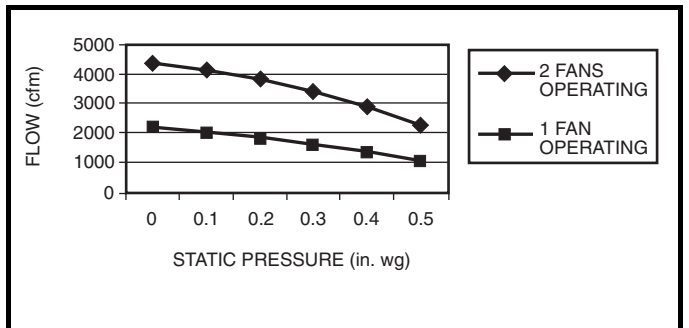
**Vertical EconoMi\$er Barometric Relief Damper Characteristics**



**Horizontal EconoMi\$er Barometric Relief Damper Characteristics**

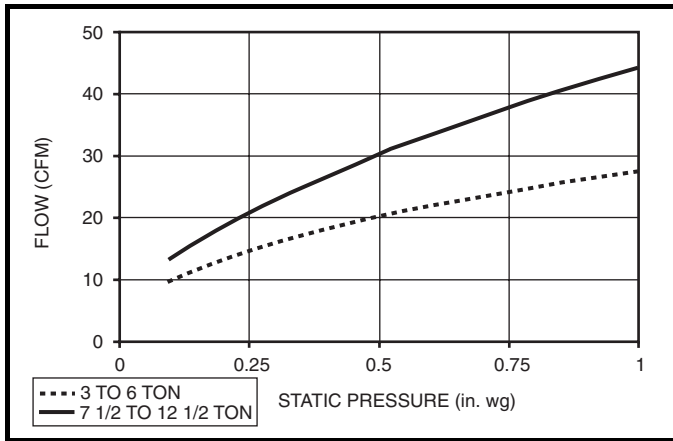


**EconoMi\$er Power Exhaust Performance (551B036-072)**

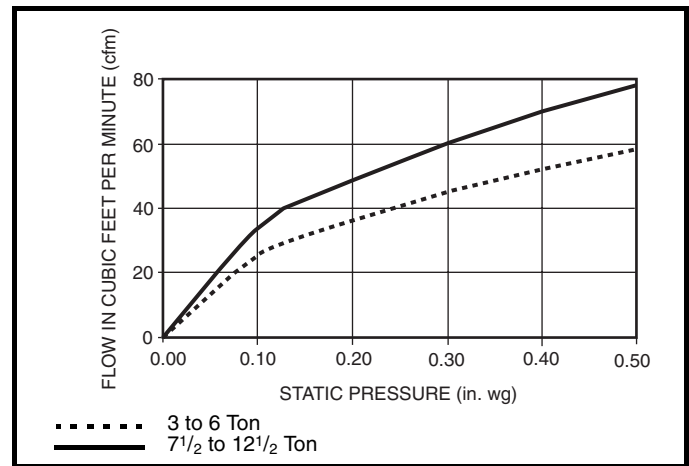


**EconoMi\$er Power Exhaust Performance (551B090-150)**

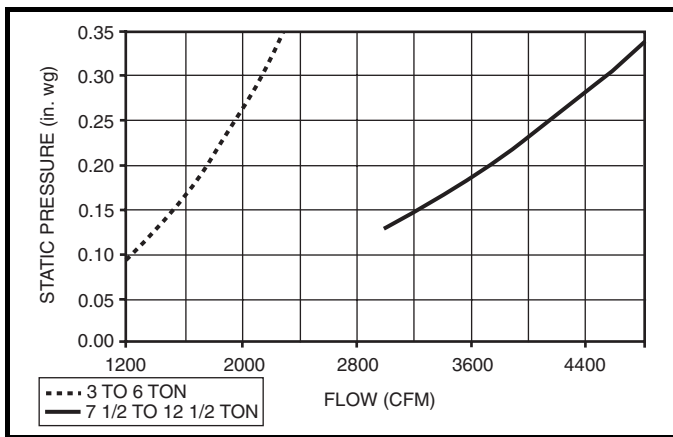
## PERFORMANCE DATA (cont)



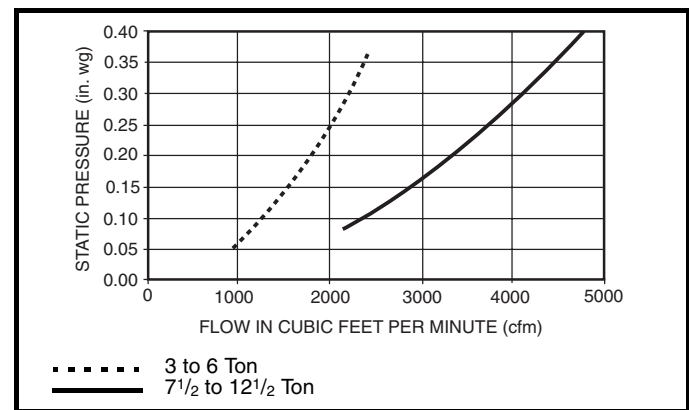
**Vertical EconoMi\$er Outdoor-Air Leakage**



**Horizontal EconoMi\$er Outdoor Air Leakage**



**Vertical EconoMi\$er Return-Air Pressure Drop**



**Horizontal EconoMi\$er Return Air Pressure Drop**

## OUTDOOR SOUND POWER (TOTAL UNIT)

| UNIT<br>551B | ARI RATING<br>(dB) | OCTAVE BANDS |      |      |      |      |      |      |      |
|--------------|--------------------|--------------|------|------|------|------|------|------|------|
|              |                    | 63           | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
| 036,048      | 76                 | 55.9         | 66.0 | 64.0 | 66.2 | 68.4 | 64.5 | 61.7 | 57.3 |
| 060,072      | 80                 | 59.1         | 68.9 | 68.7 | 71.9 | 74.0 | 68.9 | 65.7 | 59.0 |
| 090,102      | 82                 | 62.2         | 69.3 | 71.5 | 74.7 | 76.2 | 72.9 | 68.7 | 61.5 |
| 120          | 84                 | 64.6         | 71.1 | 73.3 | 76.9 | 77.6 | 73.7 | 70.6 | 63.7 |
| 150          | 86                 | 63.7         | 69.9 | 72.5 | 78.2 | 81.1 | 77.3 | 73.3 | 66.8 |

### LEGEND

ARI — Air Conditioning and Refrigeration Institute  
dB — Sound Levels (decibels)

## ELECTRIC HEATING CAPACITIES

| UNIT<br>551B | VOLTAGE<br>(60 Hz)        | ACCESSORY<br>kW | ACCESSORY<br>HEATER<br>PART NUMBER<br>CRHEATER---A00 | ACCESSORY<br>SINGLE<br>POINT BOX<br>PART NO.<br>CRSINGLE---A00 |
|--------------|---------------------------|-----------------|------------------------------------------------------|----------------------------------------------------------------|
| 036          | 208/230<br>(single phase) | 4.4             | 101                                                  | —                                                              |
|              |                           | 6.5             | 102                                                  | —                                                              |
|              |                           | 8.7             | 103                                                  | —                                                              |
|              |                           | 10.5            | 104                                                  | 002                                                            |
|              |                           | 13.0*           | 102*                                                 | 002                                                            |
|              | 208/230<br>(3 phase)      | 4.4             | 101                                                  | —                                                              |
|              |                           | 6.5             | 102                                                  | —                                                              |
|              |                           | 8.7             | 103                                                  | —                                                              |
|              |                           | 10.5            | 104                                                  | —                                                              |
| 048          | 208/230<br>(single phase) | 6.0             | 106                                                  | —                                                              |
|              |                           | 8.8             | 107                                                  | —                                                              |
|              |                           | 11.5            | 108                                                  | —                                                              |
|              |                           | 14.0            | 109                                                  | —                                                              |
|              |                           | 16.0            | 105                                                  | —                                                              |
|              | 208/230<br>(3 phase)      | 4.4             | 101                                                  | —                                                              |
|              |                           | 6.5             | 102                                                  | —                                                              |
|              |                           | 8.7             | 103                                                  | —                                                              |
|              |                           | 10.5            | 104                                                  | 002                                                            |
| 060          | 208/230<br>(single phase) | 6.0             | 106                                                  | —                                                              |
|              |                           | 8.7             | 103                                                  | 002                                                            |
|              |                           | 10.5            | 104                                                  | 002                                                            |
|              |                           | 13.0*           | 102*                                                 | 002                                                            |
|              |                           | 17.4*           | 103*                                                 | 002                                                            |
|              | 208/230<br>(3 phase)      | 6.0             | 106                                                  | —                                                              |
|              |                           | 8.7             | 103                                                  | —                                                              |
|              |                           | 10.5            | 104                                                  | 002                                                            |
|              |                           | 13.0*           | 102*                                                 | 002                                                            |

| UNIT<br>551B | VOLTAGE<br>(60 Hz)   | ACCESSORY<br>kW | ACCESSORY<br>HEATER<br>PART NUMBER<br>CRHEATER---A00 | ACCESSORY<br>SINGLE<br>POINT BOX<br>PART NO.<br>CRSINGLE---A00 |
|--------------|----------------------|-----------------|------------------------------------------------------|----------------------------------------------------------------|
| 072          | 208/230<br>(3 phase) | 6.5             | 102                                                  | —                                                              |
|              |                      | 10.5            | 104                                                  | —                                                              |
|              |                      | 16.0            | 105                                                  | 002                                                            |
|              |                      | 21.0*           | 104*                                                 | 002                                                            |
|              |                      | 26.5*           | 105,104                                              | 002                                                            |
|              | 460<br>(3 phase)     | 6.0             | 106                                                  | —                                                              |
|              |                      | 11.5            | 108                                                  | —                                                              |
|              |                      | 14.0            | 109                                                  | —                                                              |
|              |                      | 23.0*           | 108*                                                 | —                                                              |
| 090,<br>102  | 208/230<br>(3 phase) | 10.5            | 117                                                  | 006                                                            |
|              |                      | 16.0            | 110                                                  | 006                                                            |
|              |                      | 24.8            | 111                                                  | 007                                                            |
|              |                      | 32.0            | 112                                                  | 007                                                            |
|              |                      | 42.4*           | 112,117                                              | 007†                                                           |
|              | 460<br>(3 phase)     | 14.0            | 116                                                  | 006                                                            |
|              |                      | 16.5            | 113                                                  | 006                                                            |
|              |                      | 27.8            | 114                                                  | 006                                                            |
|              |                      | 33.0            | 115                                                  | 006                                                            |
| 120,<br>150  | 208/230<br>(3 phase) | 17.0            | 118                                                  | 006                                                            |
|              |                      | 34.0            | 119                                                  | 006                                                            |
|              |                      | 10.5            | 117                                                  | 012                                                            |
|              |                      | 16.0            | 110                                                  | 012                                                            |
|              |                      | 32.0            | 112                                                  | 012                                                            |
|              | 460<br>(3 phase)     | 42.4*           | 112,117                                              | 015                                                            |
|              |                      | 50.0*           | 112,110                                              | 015                                                            |
|              |                      | 16.5            | 113                                                  | 011                                                            |
|              |                      | 27.8            | 114                                                  | 011                                                            |

\*Two heater packages required to provide kW indicated.

†009 for 551B102 units.

\*\*On units with factory-installed outlet, use CRSINGLE014A00.

### NOTES:

- The kW ratings shown above are at 240, 480, and 575 v. Use the Multiplication Factors table below to determine heater capacity for your particular voltage.

### MULTIPLICATION FACTORS

| HEATER kW<br>RATING | VOLTAGE DISTRIBUTION<br>V/3/60 | MULTIPLICATION<br>FACTOR |
|---------------------|--------------------------------|--------------------------|
| 240                 | 200                            | .69                      |
|                     | 208                            | .75                      |
|                     | 230                            | .92                      |
|                     | 240                            | 1.00                     |
| 480                 | 440                            | .84                      |
|                     | 460                            | .92                      |
|                     | 480                            | 1.00                     |

Example: 32.0 kW (at 240 v) heater on 208 v  
= 32.0 (.75 mult factor)  
= 24.0 kW capacity at 208 v

- Heaters are not available for size 036-072 575-v units.

## LEGEND AND NOTES FOR ELECTRICAL DATA TABLES

|             |                                               |
|-------------|-----------------------------------------------|
| <b>FLA</b>  | — Full Load Amps                              |
| <b>HACR</b> | — Heating, Air Conditioning and Refrigeration |
| <b>IFM</b>  | — Indoor (Evaporator) Fan Motor               |
| <b>LRA</b>  | — Locked Rotor Amps                           |
| <b>MCA</b>  | — Minimum Circuit Amps                        |
| <b>MOC</b>  | — Maximum Overcurrent Protection              |
| <b>NEC</b>  | — National Electrical Code                    |
| <b>OFM</b>  | — Outdoor (Condenser) Fan Motor               |
| <b>RLA</b>  | — Rated Load Amps                             |
| <b>UL</b>   | — Underwriters' Laboratories                  |



\*Used to determine minimum disconnect per NEC.

†Heater capacity (kW) is based on heater voltage of 208 v, 240 v, 480 v or 575 v. If power distribution voltage to unit varies from rated heater voltage, heater kW will vary accordingly.

\*\*Fuse or HACR circuit breaker per NEC.

††Units have 2 condenser-fan motors.

### NOTES:

- In compliance with NEC requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker.

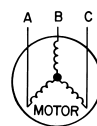
#### 2. Unbalanced 3-Phase Supply Voltage

Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percent of voltage imbalance.

% Voltage Imbalance

$$= 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 460-3-60.



AB = 452 v  
BC = 464 v  
AC = 455 v

$$\text{Average Voltage} = \frac{452 + 464 + 455}{3}$$

$$= \frac{1371}{3}$$

$$= 457$$

Determine maximum deviation from average voltage.

$$(\text{AB}) 457 - 452 = 5 \text{ v}$$

$$(\text{BC}) 464 - 457 = 7 \text{ v}$$

$$(\text{AC}) 457 - 455 = 2 \text{ v}$$

Maximum deviation is 7 v.

Determine percent of voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{7}{457}$$

$$= 1.53\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

**IMPORTANT:** If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

- Non-fused disconnect switch cannot be used when rooftop unit electrical ratings exceed 80 amps.
- 575-v units have UL, Canada approval only. Electric heaters are not available for 036-072, 575-v units.

**ELECTRICAL DATA**  
**STANDARD MOTOR UNITS WITHOUT ELECTRICAL CONVENIENCE OUTLET**

| UNIT                        | NOMINAL<br>VOLTAGE<br>(V-Ph-Hz) | VOLTAGE<br>RANGE |     | COMPRESSOR |       | OFM | IFM | ELECTRIC HEAT                                                    |                                                                    | POWER SUPPLY                                                                      |                                                                 | MINIMUM UNIT<br>DISCONNECT<br>SIZE*                      |         |
|-----------------------------|---------------------------------|------------------|-----|------------|-------|-----|-----|------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------|---------|
|                             |                                 | Min              | Max | RLA        | LRA   | FLA | FLA | Nominal kW†                                                      | FLA                                                                | MCA                                                                               | MOCP                                                            | FLA                                                      | LRA     |
| <b>551B036<br/>(3 Tons)</b> | 208/230-1-60                    | 187              | 254 | 16.0       | 88.0  | 0.7 | 4.9 | —<br>3.3/ 4.4<br>4.9/ 6.5<br>6.5/ 8.7<br>7.9/10.5<br>8.7/13.0    | —<br>15.9/18.3<br>23.5/27.1<br>31.4/36.3<br>37.9/43.1<br>46.9/54.2 | 25.6/25.6<br>26.0/29.0<br>35.5/40.0<br>45.4/51.4<br>53.5/60.0<br>64.8/73.8        | 35/35**<br>35/35**<br>40/40**<br>50/60**<br>60/60**<br>70/80    | 25/25<br>25/27<br>33/37<br>42/47<br>49/55<br>60/68       | 101/101 |
|                             | 208/230-3-60                    | 187              | 254 | 10.3       | 77.0  | 0.7 | 4.9 | —<br>3.3/ 4.4<br>4.9/ 6.5<br>6.5/ 8.7<br>7.9/10.5<br>12.0/16.0   | —<br>9.2/10.6<br>13.6/15.6<br>18.1/20.9<br>21.9/25.3<br>33.5/38.6  | 18.5/18.5<br>18.5/19.4<br>23.1/25.7<br>28.8/32.3<br>33.5/37.7<br>47.8/54.2        | 25/25**<br>25/25**<br>25/30**<br>30/35**<br>35/40**<br>50/60**  | 18/18<br>18/18<br>21/24<br>26/30<br>31/35<br>44/50       | 90/90   |
|                             | 460-3-60                        | 414              | 508 | 5.1        | 39.0  | 0.4 | 2.2 | —<br>6.0<br>8.8<br>11.5<br>14.0                                  | —<br>7.2<br>10.6<br>13.8<br>16.8                                   | 9.0<br>11.8<br>16.0<br>20.0<br>23.8                                               | 15**<br>15**<br>20**<br>25**<br>25**                            | 9<br>11<br>15<br>18<br>22                                | 46      |
|                             | 575-3-60                        | 518              | 632 | 4.2        | 31.0  | 0.4 | 2.2 | —                                                                | —                                                                  | 7.3                                                                               | 15**                                                            | 7                                                        | 36      |
| <b>551B048<br/>(4 Tons)</b> | 208/230-1-60                    | 187              | 254 | 23.7       | 129.0 | 0.7 | 4.9 | —<br>3.3/ 4.4<br>4.9/ 6.5<br>8.7/13.0<br>13.0/17.4<br>15.8/21.0  | —<br>15.9/18.3<br>31.4/36.3<br>46.9/54.2<br>62.8/72.5<br>75.8/87.5 | 35.2/ 35.2<br>35.2/ 35.2<br>45.4/ 51.4<br>64.8/ 73.8<br>84.7/ 96.8<br>100.9/115.5 | 45/ 45**<br>45/ 45**<br>50/ 60**<br>70/ 80<br>90/100<br>110/125 | 34/ 34<br>34/ 34<br>42/ 47<br>60/ 68<br>78/ 89<br>93/106 | 142/142 |
|                             | 208/230-3-60                    | 187              | 254 | 13.5       | 99.0  | 0.7 | 4.9 | —<br>4.9/ 6.5<br>6.5/ 8.7<br>12.0/16.0<br>15.8/21.0              | —<br>13.6/15.6<br>18.1/20.9<br>33.4/38.5<br>43.8/50.5              | 22.5/22.5<br>23.1/25.7<br>28.8/32.3<br>47.8/54.2<br>60.8/69.3                     | 30/30**<br>30/30**<br>30/35**<br>50/60**<br>70/80               | 22/22<br>22/24<br>26/30<br>44/50<br>56/64                | 112/112 |
|                             | 460-3-60                        | 414              | 508 | 7.4        | 49.5  | 0.4 | 2.2 | —<br>6.0<br>11.5<br>14.0<br>23.0                                 | —<br>7.2<br>13.8<br>16.6<br>27.7                                   | 11.9<br>11.9<br>20.0<br>23.8<br>37.3                                              | 15**<br>15**<br>25**<br>25**<br>40**                            | 12<br>12<br>18<br>22<br>34                               | 57      |
|                             | 575-3-60                        | 518              | 632 | 5.8        | 40.0  | 0.4 | 2.2 | —                                                                | —                                                                  | 9.3                                                                               | 15**                                                            | 9                                                        | 45      |
| <b>551B060<br/>(5 Tons)</b> | 208/230-1-60                    | 187              | 254 | 28.8       | 169.0 | 1.5 | 8.8 | —<br>4.9/ 6.5<br>6.5/ 8.7<br>8.7/13.0<br>13.0/17.4<br>15.8/21.0  | —<br>23.5/27.1<br>31.4/36.3<br>46.9/54.2<br>62.8/72.5<br>75.8/87.5 | 46.3/ 46.3<br>46.3/ 46.3<br>50.3/ 56.3<br>69.7/ 78.7<br>89.5/101.6<br>105.8/120.4 | 60/ 60**<br>60/ 60**<br>60/ 60**<br>70/ 80<br>90/110<br>110/125 | 45/ 45<br>45/ 45<br>46/ 52<br>64/ 72<br>82/ 93<br>97/111 | 216/216 |
|                             | 208/230-3-60                    | 187              | 254 | 17.3       | 123.0 | 1.5 | 5.8 | —<br>4.9/ 6.5<br>7.9/10.5<br>12.0/16.0<br>15.8/21.0<br>19.9/26.5 | —<br>13.6/15.6<br>21.9/25.3<br>33.4/38.5<br>43.8/50.5<br>55.2/63.8 | 28.9/28.9<br>28.9/28.9<br>34.6/38.8<br>48.9/55.4<br>62.0/70.4<br>76.3/86.9        | 35/35**<br>35/35**<br>35/40**<br>50/60**<br>70/80<br>80/90      | 28/28<br>28/28<br>32/36<br>45/51<br>57/65<br>70/80       | 168/168 |
|                             | 460-3-60                        | 414              | 508 | 9.0        | 62.0  | 0.8 | 2.6 | —<br>6.0<br>11.5<br>14.0<br>23.0<br>25.5                         | —<br>7.2<br>13.8<br>16.8<br>27.7<br>30.1                           | 14.7<br>14.7<br>20.5<br>24.3<br>37.8<br>40.8                                      | 20**<br>20**<br>25**<br>25**<br>40**<br>45**                    | 14<br>14<br>19<br>22<br>35<br>38                         | 84      |
|                             | 575-3-60                        | 518              | 632 | 7.1        | 50.0  | 0.8 | 2.6 | —                                                                | —                                                                  | 11.6                                                                              | 15**                                                            | 11                                                       | 67      |
| <b>551B072<br/>(6 Tons)</b> | 208/230-3-60                    | 187              | 254 | 20.5       | 156.0 | 1.4 | 5.8 | —<br>4.9/ 6.5<br>7.9/10.5<br>12.0/16.0<br>15.8/21.0<br>19.9/26.5 | —<br>13.6/15.6<br>21.9/25.3<br>33.4/38.5<br>43.8/50.5<br>55.2/63.8 | 32.8/32.8<br>32.8/32.8<br>34.6/38.8<br>48.9/55.4<br>62.0/70.4<br>76.3/86.9        | 40/40**<br>40/40**<br>40/40**<br>50/60**<br>70/80<br>80/90      | 32/32<br>32/32<br>32/36<br>45/51<br>57/65<br>70/80       | 200/200 |
|                             | 460-3-60                        | 414              | 508 | 9.6        | 70.0  | 0.6 | 2.6 | —<br>6.0<br>11.5<br>14.0<br>23.0<br>25.5                         | —<br>7.2<br>13.8<br>16.8<br>27.7<br>30.7                           | 15.2<br>15.2<br>20.5<br>24.3<br>37.8<br>41.6                                      | 20**<br>20**<br>25**<br>25**<br>40**<br>45**                    | 15<br>15<br>19<br>22<br>35<br>38                         | 92      |
|                             | 575-3-60                        | 518              | 632 | 7.7        | 56.0  | 0.6 | 2.6 | —                                                                | —                                                                  | 12.2                                                                              | 15**                                                            | 13                                                       | 78      |

**NOTE:** See legend and notes on page 46.

# **ELECTRICAL DATA (cont)**

## **STANDARD MOTOR UNITS WITHOUT ELECTRICAL CONVENIENCE OUTLET (cont)**

| UNIT                            | NOMINAL<br>VOLTAGE<br>(V-Ph-Hz) | VOLTAGE<br>RANGE |     | COMPRESSOR<br>(each) |       | OFM<br>(each) | IFM  | ELECTRIC HEAT                                                     |                                                                          | POWER SUPPLY                                                                        |                                                                  | MINIMUM UNIT<br>DISCONNECT<br>SIZE*                        |         |
|---------------------------------|---------------------------------|------------------|-----|----------------------|-------|---------------|------|-------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------|---------|
|                                 |                                 | Min              | Max | RLA                  | LRA   | FLA           | FLA  | Nominal kW†                                                       | FLA                                                                      | MCA                                                                                 | MOCP                                                             | FLA                                                        | LRA     |
| <b>551B090††<br/>(7½ Tons)</b>  | 208/230-3-60                    | 187              | 254 | 12.4                 | 88.0  | 1.4           | 7.5  | —<br>7.8/10.5<br>12.0/16.0<br>18.6/24.8<br>24.0/32.0<br>31.8/42.4 | —<br>21.7/ 25.0<br>33.3/ 38.5<br>51.6/ 57.7<br>66.7/ 77.0<br>88.5/102.0  | 38.2/ 38.2<br>38.2/ 40.6<br>51.1/ 57.5<br>74.0/ 84.0<br>92.8/105.6<br>119.9/136.9   | 45/ 45**<br>45/ 45**<br>60/ 60**<br>80/ 90<br>100/110<br>125/150 | 40/ 40<br>40/ 40<br>47/ 53<br>68/ 77<br>85/ 97<br>110/126  | 242/242 |
|                                 | 460-3-60                        | 414              | 508 | 6.4                  | 44.0  | 0.7           | 3.4  | —<br>14.0<br>16.5<br>27.8<br>33.0<br>41.7                         | —<br>16.7<br>19.8<br>33.4<br>39.7<br>50.2                                | 19.2<br>25.1<br>29.1<br>46.0<br>53.9<br>66.9                                        | 25**<br>30**<br>30**<br>50**<br>60**<br>70                       | 20<br>23<br>27<br>42<br>50<br>62                           | 121     |
|                                 | 575-3-60                        | 518              | 632 | 4.8                  | 34.0  | 0.7           | 3.4  | —<br>17.0<br>34.0                                                 | —<br>17.1<br>34.1                                                        | 14.6<br>24.7<br>46.1                                                                | 20**<br>25**<br>50**                                             | 15<br>23<br>42                                             | 95      |
| <b>551B102††<br/>(8½ Tons)</b>  | 208/230-3-60                    | 187              | 254 | 15.0                 | 99.0  | 1.4           | 7.5  | —<br>7.8/10.5<br>12.0/16.0<br>18.6/24.8<br>24.0/32.0<br>31.8/42.4 | —<br>21.7/ 25.0<br>33.3/ 38.5<br>51.6/ 59.7<br>66.6/ 77.0<br>88.3/102.0  | 44.1/ 44.1<br>44.1/ 44.1<br>51.1/ 57.5<br>74.0/ 84.0<br>92.8/105.6<br>119.9/136.9   | 50/ 50**<br>50/ 50**<br>60/ 60**<br>80/ 90<br>100/110<br>125/150 | 46/ 46<br>46/ 46<br>47/ 53<br>68/ 77<br>85/ 97<br>110/126  | 264/264 |
|                                 | 460-3-60                        | 414              | 508 | 8.2                  | 49.5  | 0.7           | 3.4  | —<br>14.0<br>16.5<br>27.8<br>33.0<br>41.7                         | —<br>16.7<br>19.8<br>33.4<br>39.7<br>50.2                                | 23.3<br>25.1<br>29.1<br>46.0<br>53.9<br>66.9                                        | 30**<br>30**<br>30**<br>50**<br>60**<br>70                       | 24<br>24<br>27<br>42<br>50<br>62                           | 132     |
|                                 | 575-3-60                        | 518              | 632 | 5.8                  | 40.0  | 0.7           | 3.4  | —<br>17.0<br>34.0                                                 | —<br>17.1<br>34.1                                                        | 16.9<br>24.7<br>46.1                                                                | 20**<br>25**<br>50**                                             | 18<br>23<br>42                                             | 107     |
| <b>551B120††<br/>(10 Tons)</b>  | 208/230-3-60                    | 187              | 254 | 17.3                 | 123.0 | 1.4           | 10.6 | —<br>7.8/10.5<br>12.0/16.0<br>24.0/32.0<br>31.8/42.4<br>37.5/50.0 | —<br>21.7/ 25.0<br>33.3/ 38.5<br>66.6/ 77.0<br>88.4/102.0<br>104.4/120.3 | 52.3/ 52.3<br>52.3/ 52.3<br>54.9/ 61.4<br>96.6/109.5<br>123.7/140.8<br>143.5/133.5  | 60/ 60**<br>60/ 60**<br>70/ 70<br>100/110<br>125/150<br>150/150  | 55/ 55<br>55/ 55<br>55/ 56<br>89/101<br>114/129<br>132/151 | 337/337 |
|                                 | 460-3-60                        | 414              | 508 | 9.0                  | 62.0  | 0.7           | 4.8  | —<br>16.5<br>27.8<br>33.0<br>41.7<br>50.0                         | —<br>19.8<br>33.4<br>39.7<br>50.2<br>60.1                                | 26.5<br>30.8<br>47.8<br>55.6<br>68.7<br>66.1                                        | 30**<br>35**<br>50**<br>60**<br>70<br>70                         | 28<br>28<br>44<br>51<br>63<br>75                           | 170     |
|                                 | 575-3-60                        | 518              | 632 | 7.1                  | 50.0  | 0.7           | 4.8  | —<br>17.0<br>34.0<br>51.0                                         | —<br>17.1<br>34.1<br>51.2                                                | 20.9<br>26.1<br>47.5<br>56.0                                                        | 25**<br>30**<br>50**<br>60**                                     | 22<br>24<br>44<br>63                                       | 136     |
| <b>551B150††<br/>(12½ Tons)</b> | 208/230-3-60                    | 187              | 254 | 19.0                 | 156.0 | 1.4           | 15.0 | —<br>7.8/10.5<br>12.0/16.0<br>24.0/32.0<br>31.8/42.4<br>37.5/50.0 | —<br>21.7/ 25.0<br>33.3/ 38.5<br>66.6/ 77.0<br>88.3/102.0<br>104.4/120.3 | 60.6/ 60.6<br>60.6/ 60.6<br>60.6/ 66.9<br>102.1/115.0<br>129.2/146.3<br>149.0/139.0 | 70/ 70<br>70/ 70<br>90/ 90<br>110/125<br>150/150<br>150/150      | 64/ 64<br>64/ 64<br>64/ 64<br>94/106<br>119/135<br>137/156 | 426/426 |
|                                 | 460-3-60                        | 414              | 508 | 9.0                  | 70.0  | 0.7           | 7.4  | —<br>16.5<br>27.8<br>33.0<br>41.7<br>50.0                         | —<br>19.8<br>33.4<br>39.7<br>50.2<br>60.1                                | 29.1<br>34.1<br>51.0<br>58.9<br>71.9<br>69.4                                        | 35**<br>40**<br>60**<br>60**<br>80<br>80                         | 31<br>31<br>47<br>54<br>66<br>78                           | 197     |
|                                 | 575-3-60                        | 518              | 632 | 7.4                  | 54.0  | 0.7           | 7.4  | —<br>17.0<br>34.0<br>51.0                                         | —<br>17.1<br>34.1<br>51.2                                                | 23.7<br>28.7<br>50.1<br>58.6                                                        | 30**<br>35**<br>60**<br>70                                       | 25<br>26<br>46<br>66                                       | 154     |

**NOTE:** See legend and notes on page 46.

**ELECTRICAL DATA (cont)**  
**STANDARD MOTOR UNITS WITH ELECTRICAL CONVENIENCE OUTLET**

| UNIT                        | NOMINAL<br>VOLTAGE<br>(V-Ph-Hz) | VOLTAGE<br>RANGE |     | COMPRESSOR |       | OFM | IFM | ELECTRIC HEAT                                                               |                                                                                  | POWER SUPPLY                                                                                 |                                                                  | MINIMUM UNIT<br>DISCONNECT<br>SIZE*                       |         |
|-----------------------------|---------------------------------|------------------|-----|------------|-------|-----|-----|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------|---------|
|                             |                                 | Min              | Max | RLA        | LRA   | FLA | FLA | Nominal kW†                                                                 | FLA                                                                              | MCA                                                                                          | MOCP                                                             | FLA                                                       | LRA     |
| <b>551B036<br/>(3 Tons)</b> | 208/230-1-60                    | 187              | 254 | 16.0       | 88.0  | 0.7 | 4.9 | —<br>3.3/ 4.4<br>4.9/ 6.5<br>6.5/ 8.7<br>7.9/10.5<br>8.7/13.0               | —<br>15.9/18.3<br>23.5/27.1<br>31.4/36.3<br>37.9/43.1<br>46.9/54.2               | 31.6/31.6<br>31.6/34.0<br>40.5/45.0<br>50.4/56.4<br>58.5/65.0<br>69.8/78.8                   | 40/40**<br>40/40**<br>45/45**<br>60/60**<br>60/70<br>70/80       | 30/30<br>30/32<br>38/42<br>47/53<br>55/61<br>65/73        | 106/106 |
|                             | 208/230-3-60                    | 187              | 254 | 10.3       | 77.0  | 0.7 | 4.9 | —<br>3.3/ 4.4<br>4.9/ 6.5<br>6.5/ 8.7<br>7.9/10.5<br>12.0/16.0              | —<br>9.2/10.6<br>13.6/15.6<br>18.1/20.9<br>21.9/25.3<br>33.5/38.6                | 24.5/24.5<br>24.5/24.5<br>28.1/30.7<br>33.8/37.3<br>38.5/42.7<br>52.8/59.2                   | 30/30**<br>30/30**<br>30/35**<br>35/40**<br>40/45**<br>60/60**   | 24/24<br>24/24<br>27/29<br>32/35<br>36/40<br>50/55        | 95/95   |
|                             | 460-3-60                        | 414              | 508 | 5.1        | 39.0  | 0.4 | 2.2 | —<br>6.0<br>8.8<br>11.5<br>14.0                                             | —<br>7.2<br>10.6<br>13.8<br>16.8                                                 | 11.7<br>14.4<br>18.7<br>22.7<br>26.5                                                         | 15**<br>15**<br>20**<br>25**<br>30**                             | 11<br>13<br>17<br>21<br>24                                | 48      |
|                             | 575-3-60                        | 518              | 632 | 4.2        | 31.0  | 0.4 | 2.2 | —                                                                           | —                                                                                | 9.5                                                                                          | 15**                                                             | 9                                                         | 38      |
| <b>551B048<br/>(4 Tons)</b> | 208/230-1-60                    | 187              | 254 | 23.7       | 129.0 | 0.7 | 4.9 | —<br>3.3/ 4.4<br>4.9/ 6.5<br>6.5/ 8.7<br>8.7/13.0<br>13.0/17.4<br>15.8/21.0 | —<br>15.9/18.3<br>31.4/36.3<br>46.9/54.2<br>62.8/72.5<br>89.7/101.8<br>75.8/87.5 | 41.2/ 41.2<br>41.2/ 41.2<br>50.4/ 56.4<br>69.8/ 78.8<br>89.7/101.8<br>100/110<br>105.9/120.5 | 50/ 50**<br>50/ 50**<br>60/ 60**<br>80/ 90<br>100/110<br>110/125 | 39/ 39<br>39/ 39<br>47/ 53<br>65/ 73<br>83/ 95<br>98/112  | 147/147 |
|                             | 208/230-3-60                    | 187              | 254 | 13.5       | 99.0  | 0.7 | 4.9 | —<br>4.9/ 6.5<br>6.5/ 8.7<br>12.0/16.0<br>15.8/21.0                         | —<br>13.6/15.6<br>18.1/20.9<br>33.4/38.5<br>43.8/50.5                            | 28.5/28.5<br>28.5/30.7<br>33.8/37.3<br>52.8/59.2<br>65.8/74.3                                | 35/35**<br>35/35**<br>35/40**<br>60/60**<br>70/80                | 27/27<br>27/29<br>32/35<br>50/55<br>62/69                 | 117/117 |
|                             | 460-3-60                        | 414              | 508 | 7.4        | 49.5  | 0.4 | 2.2 | —<br>6.0<br>11.5<br>14.0<br>23.0                                            | —<br>7.2<br>13.8<br>16.6<br>27.7                                                 | 14.6<br>15.1<br>22.7<br>26.5<br>40.0                                                         | 20**<br>20**<br>25**<br>30**<br>45**                             | 14<br>14<br>21<br>24<br>37                                | 59      |
|                             | 575-3-60                        | 518              | 632 | 5.8        | 40.0  | 0.4 | 2.2 | —                                                                           | —                                                                                | 11.5                                                                                         | 15**                                                             | 11                                                        | 47      |
| <b>551B060<br/>(5 Tons)</b> | 208/230-1-60                    | 187              | 254 | 28.8       | 169.0 | 1.5 | 8.8 | —<br>4.9/ 6.5<br>6.5/ 8.7<br>8.7/13.0<br>13.0/17.4<br>15.8/21.0             | —<br>23.5/27.1<br>31.4/36.3<br>46.9/54.2<br>62.8/72.5<br>75.8/87.5               | 52.3/ 52.3<br>52.3/ 52.3<br>55.3/ 61.3<br>74.7/ 83.7<br>94.5/106.6<br>110.8/125.4            | 60/ 60**<br>60/ 60**<br>60/ 70<br>80/ 90<br>100/110<br>125/150   | 50/ 50<br>50/ 50<br>52/ 57<br>70/ 78<br>88/ 99<br>103/116 | 221/221 |
|                             | 208/230-3-60                    | 187              | 254 | 17.3       | 123.0 | 1.5 | 5.8 | —<br>4.9/ 6.5<br>7.9/10.5<br>12.0/16.0<br>15.8/21.0<br>19.9/26.5            | —<br>13.6/15.6<br>21.9/25.3<br>33.4/38.5<br>43.8/50.5<br>55.2/63.8               | 34.9/34.9<br>34.9/34.9<br>39.6/43.8<br>53.9/60.4<br>67.0/75.4<br>81.3/91.9                   | 40/ 40**<br>40/ 40**<br>40/ 45**<br>60/ 70<br>70/ 80<br>90/100   | 34/34<br>34/34<br>37/41<br>51/56<br>63/70<br>76/86        | 173/173 |
|                             | 460-3-60                        | 414              | 508 | 9.0        | 62.0  | 0.8 | 2.6 | —<br>6.0<br>11.5<br>14.0<br>23.0<br>25.5                                    | —<br>7.2<br>13.8<br>16.8<br>27.7<br>30.1                                         | 17.4<br>17.4<br>23.2<br>27.0<br>40.5<br>43.5                                                 | 20**<br>20**<br>25**<br>30**<br>45**<br>45**                     | 17<br>17<br>21<br>25<br>37<br>40                          | 87      |
|                             | 575-3-60                        | 518              | 632 | 7.1        | 50.0  | 0.8 | 2.6 | —                                                                           | —                                                                                | 13.8                                                                                         | 20**                                                             | 13                                                        | 69      |
| <b>551B072<br/>(6 Tons)</b> | 208/230-3-60                    | 187              | 254 | 20.5       | 156.0 | 1.4 | 5.8 | —<br>4.9/ 6.5<br>7.9/10.5<br>12.0/16.0<br>15.8/21.0<br>19.9/26.5            | —<br>13.6/15.6<br>21.9/25.3<br>33.4/38.5<br>43.8/50.5<br>55.2/63.8               | 38.8/38.8<br>38.8/38.8<br>39.6/43.8<br>53.9/60.4<br>67.0/75.4<br>81.3/91.9                   | 45/ 45**<br>45/ 45**<br>45/ 45**<br>60/ 70<br>70/ 80<br>90/100   | 37/37<br>37/37<br>37/41<br>51/56<br>63/70<br>76/86        | 205     |
|                             | 460-3-60                        | 414              | 508 | 9.6        | 70.0  | 0.6 | 2.6 | —<br>6.0<br>11.5<br>14.0<br>23.0<br>25.5                                    | —<br>7.2<br>13.8<br>16.8<br>27.7<br>30.7                                         | 17.9<br>17.9<br>23.2<br>27.0<br>40.5<br>44.3                                                 | 20**<br>20**<br>25**<br>30**<br>45**<br>45**                     | 17<br>17<br>21<br>25<br>37<br>41                          | 94      |
|                             | 575-3-60                        | 518              | 632 | 7.7        | 56.0  | 0.6 | 2.6 | —                                                                           | —                                                                                | 14.3                                                                                         | 20**                                                             | 15                                                        | 79      |

**NOTE:** See legend and notes on page 46.

# **ELECTRICAL DATA (cont)**

## **STANDARD MOTOR UNITS WITH ELECTRICAL CONVENIENCE OUTLET (cont)**

| UNIT                            | NOMINAL<br>VOLTAGE<br>(V-Ph-Hz) | VOLTAGE<br>RANGE |     | COMPRESSOR<br>(each) |       | OFM<br>(each) | IFM  | ELECTRIC HEAT                                                     |                                                                          | POWER SUPPLY                                                                        |                                                                  | MINIMUM UNIT<br>DISCONNECT<br>SIZE*                        |         |
|---------------------------------|---------------------------------|------------------|-----|----------------------|-------|---------------|------|-------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------|---------|
|                                 |                                 | Min              | Max | RLA                  | LRA   | FLA           | FLA  | Nominal kW†                                                       | FLA                                                                      | MCA                                                                                 | MOCP                                                             | FLA                                                        | LRA     |
| <b>551B090††<br/>(7½ Tons)</b>  | 208/230-3-60                    | 187              | 254 | 12.4                 | 88.0  | 1.4           | 7.5  | —<br>7.8/10.5<br>12.0/16.0<br>18.6/24.8<br>24.0/32.0<br>31.8/42.4 | —<br>21.7/ 25.0<br>33.3/ 38.5<br>51.6/ 57.7<br>66.7/ 77.0<br>88.5/102.0  | 44.2/ 44.2<br>44.2/ 45.6<br>56.1/ 62.5<br>79.0/ 89.0<br>97.8/110.6<br>124.9/141.9   | 50/ 50**<br>50/ 50**<br>60/ 70<br>80/ 90<br>100/125<br>125/150   | 46/ 46<br>46/ 46<br>53/ 58<br>74/ 83<br>91/103<br>116/131  | 246/246 |
|                                 | 460-3-60                        | 414              | 508 | 6.4                  | 44.0  | 0.7           | 3.4  | —<br>14.0<br>16.5<br>27.8<br>33.0<br>41.7                         | —<br>16.7<br>19.8<br>33.4<br>39.7<br>50.2                                | 21.9<br>27.8<br>31.8<br>48.7<br>56.6<br>69.6                                        | 25**<br>30**<br>35**<br>50**<br>60**<br>70                       | 23<br>26<br>29<br>45<br>52<br>64                           | 124     |
|                                 | 575-3-60                        | 518              | 632 | 4.8                  | 34.0  | 0.7           | 3.4  | —<br>17.0<br>34.0                                                 | —<br>17.1<br>34.1                                                        | 16.8<br>27.4<br>48.8                                                                | 20**<br>30**<br>50**                                             | 17<br>25<br>44                                             | 97      |
| <b>551B102††<br/>(8½ Tons)</b>  | 208/230-3-60                    | 187              | 254 | 15.0                 | 99.0  | 1.4           | 7.5  | —<br>7.8/10.5<br>12.0/16.0<br>18.6/24.8<br>24.0/32.0<br>31.8/42.4 | —<br>21.7/ 25.0<br>33.3/ 38.5<br>51.6/ 59.7<br>66.6/ 77.0<br>88.3/102.0  | 50.1/ 50.1<br>50.1/ 50.1<br>56.1/ 62.5<br>79.0/ 89.0<br>97.8/110.6<br>124.9/141.9   | 60/ 60**<br>60/ 60**<br>60/ 70**<br>80/ 90<br>100/125<br>125/150 | 52/ 52<br>52/ 52<br>53/ 58<br>74/ 83<br>91/103<br>116/131  | 268/268 |
|                                 | 460-3-60                        | 414              | 508 | 8.2                  | 49.5  | 0.7           | 3.4  | —<br>14.0<br>16.5<br>27.8<br>33.0<br>41.7                         | —<br>16.7<br>19.8<br>33.4<br>39.7<br>50.2                                | 26.0<br>28.5<br>31.8<br>48.7<br>56.6<br>69.6                                        | 30**<br>30**<br>35**<br>50**<br>60**<br>70                       | 27<br>27<br>29<br>45<br>52<br>64                           | 135     |
|                                 | 575-3-60                        | 518              | 632 | 5.8                  | 40.0  | 0.7           | 3.4  | —<br>17.0<br>34.0                                                 | —<br>17.1<br>34.1                                                        | 19.1<br>28.1<br>48.8                                                                | 25**<br>30**<br>50**                                             | 20<br>25<br>44                                             | 109     |
| <b>551B120††<br/>(10 Tons)</b>  | 208/230-3-60                    | 187              | 254 | 17.3                 | 123.0 | 1.4           | 10.6 | —<br>7.8/10.5<br>12.0/16.0<br>24.0/32.0<br>31.8/42.4<br>37.5/50.0 | —<br>21.7/ 25.0<br>33.3/ 38.5<br>66.6/ 77.0<br>88.4/102.0<br>104.4/120.3 | 58.3/ 58.3<br>58.3/ 58.3<br>59.9/ 66.4<br>101.6/114.5<br>128.7/145.8<br>148.5/138.5 | 70/ 70<br>70/ 70<br>70/ 70<br>110/125<br>150/150<br>150/150      | 61/ 61<br>61/ 61<br>61/ 62<br>94/106<br>119/135<br>138/156 | 341/341 |
|                                 | 460-3-60                        | 414              | 508 | 9.0                  | 62.0  | 0.7           | 4.8  | —<br>16.5<br>27.8<br>33.0<br>41.7<br>50.0                         | —<br>19.8<br>33.4<br>39.7<br>50.2<br>60.1                                | 29.2<br>33.6<br>50.5<br>58.4<br>71.4<br>68.9                                        | 35**<br>35**<br>60**<br>60**<br>80<br>80                         | 30<br>31<br>46<br>54<br>66<br>77                           | 172     |
|                                 | 575-3-60                        | 518              | 632 | 7.1                  | 50.0  | 0.7           | 4.8  | —<br>17.0<br>34.0<br>51.0                                         | —<br>17.1<br>34.1<br>51.2                                                | 23.1<br>28.9<br>50.2<br>58.8                                                        | 25**<br>30**<br>60**<br>70                                       | 24<br>26<br>46<br>65                                       | 139     |
| <b>551B150††<br/>(12½ Tons)</b> | 208/230-3-60                    | 187              | 254 | 19.0                 | 156.0 | 1.4           | 15.0 | —<br>7.8/10.5<br>12.0/16.0<br>24.0/32.0<br>31.8/42.4<br>37.5/50.0 | —<br>21.7/ 25.0<br>33.3/ 38.5<br>66.6/ 77.0<br>88.3/102.0<br>104.4/120.3 | 66.6/ 66.6<br>66.6/ 66.6<br>66.6/ 71.9<br>107.1/120.0<br>134.2/151.3<br>155.3/144.0 | 70/ 70<br>70/ 70<br>70/ 80<br>110/125<br>150/175<br>175/150      | 70/ 70<br>70/ 70<br>70/ 70<br>99/111<br>124/140<br>143/161 | 430/430 |
|                                 | 460-3-60                        | 414              | 508 | 9.0                  | 70.0  | 0.7           | 7.4  | —<br>16.5<br>27.8<br>33.0<br>41.7<br>50.0                         | —<br>19.8<br>33.4<br>39.7<br>50.2<br>60.1                                | 31.8<br>37.4<br>53.8<br>61.6<br>74.7<br>71.6                                        | 35**<br>40**<br>60**<br>70<br>80<br>80                           | 33<br>34<br>49<br>57<br>69<br>80                           | 200     |
|                                 | 575-3-60                        | 518              | 632 | 7.4                  | 54.0  | 0.7           | 7.4  | —<br>17.0<br>34.0<br>51.0                                         | —<br>17.1<br>34.1<br>51.2                                                | 25.9<br>31.5<br>52.8<br>60.8                                                        | 30**<br>35**<br>60**<br>70                                       | 27<br>28<br>48<br>68                                       | 156     |

**NOTE:** See legend and notes on page 46.

# **ELECTRICAL DATA (cont)**

## **HIGH-STATIC MOTOR UNITS WITHOUT ELECTRICAL CONVENIENCE OUTLET**

| UNIT<br>551B | NOMINAL<br>VOLTAGE<br>(V-Ph-Hz) | VOLTAGE<br>RANGE |     | COMPRESSOR<br>(each) |       | OFM | IFM | ELECTRIC HEAT                                                    |                                                                    | POWER SUPPLY                                                               |                                                        | MINIMUM UNIT<br>DISCONNECT<br>SIZE*                |         |
|--------------|---------------------------------|------------------|-----|----------------------|-------|-----|-----|------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------|---------|
|              |                                 | Min              | Max | RLA                  | LRA   | FLA | FLA | Nominal<br>kW†                                                   | FLA                                                                | MCA                                                                        | MOCP                                                   | FLA                                                | LRA     |
| 036          | 208/230-3-60                    | 187              | 254 | 10.3                 | 77.0  | 0.7 | 5.8 | —<br>3.3/ 4.4<br>4.9/ 6.5<br>6.5/ 8.7<br>7.9/10.5<br>12.0/16.0   | —<br>9.2/10.6<br>13.6/15.6<br>18.1/20.9<br>21.9/25.3<br>33.4/38.5  | 19.4/19.4<br>19.4/20.5<br>24.2/26.8<br>29.9/33.4<br>34.6/38.8<br>48.9/55.4 | 25/25<br>25/25<br>30/30<br>35/35<br>35/40<br>50/60     | 19/19<br>19/19<br>22/25<br>28/31<br>32/36<br>45/51 | 120/120 |
|              | 460-3-60                        | 414              | 508 | 5.1                  | 39.0  | 0.4 | 2.6 | —<br>6.0<br>8.8<br>11.5<br>14.0                                  | —<br>7.2<br>10.6<br>13.8<br>16.8                                   | 9.4<br>12.3<br>16.5<br>20.5<br>24.3                                        | 15<br>15<br>20<br>25<br>25                             | 9<br>11<br>15<br>19<br>22                          | 60      |
|              | 575-3-60                        | 518              | 632 | 4.2                  | 31.0  | 0.4 | 2.6 | —                                                                | —                                                                  | 7.7                                                                        | 15                                                     | 8                                                  | 52      |
| 048          | 208/230-3-60                    | 187              | 254 | 13.5                 | 99.0  | 0.7 | 5.8 | —<br>4.9/ 6.5<br>6.5/ 8.7<br>12.0/16.0<br>15.8/21.0              | —<br>13.6/15.6<br>18.1/20.9<br>33.4/38.5<br>43.8/50.5              | 23.4/23.4<br>24.2/26.8<br>29.9/33.4<br>48.9/55.4<br>62.0/70.4              | 30/30<br>30/30<br>35/35<br>50/60<br>70/80**            | 23/23<br>23/25<br>28/31<br>45/51<br>57/65          | 142/142 |
|              | 460-3-60                        | 414              | 508 | 7.4                  | 49.5  | 0.4 | 2.6 | —<br>6.0<br>11.5<br>14.0<br>23.0                                 | —<br>7.2<br>13.8<br>16.8<br>27.7                                   | 12.3<br>12.3<br>20.5<br>24.3<br>37.8                                       | 15<br>15<br>25<br>25<br>40                             | 12<br>12<br>19<br>22<br>35                         | 70      |
|              | 575-3-60                        | 518              | 632 | 5.8                  | 40.0  | 0.4 | 2.6 | —                                                                | —                                                                  | 9.7                                                                        | 15                                                     | 9                                                  | 57      |
| 060          | 208/230-3-60                    | 187              | 254 | 17.3                 | 123.0 | 1.5 | 7.5 | —<br>4.9/ 6.5<br>7.9/10.5<br>12.0/16.0<br>15.8/21.0<br>19.9/26.5 | —<br>13.6/15.6<br>21.9/25.3<br>33.4/38.5<br>43.8/50.5<br>55.2/63.8 | 30.6/30.6<br>30.6/30.6<br>36.7/40.9<br>51.1/57.5<br>64.1/72.5<br>78.4/89.1 | 35/35<br>35/35<br>40/45<br>60/60<br>70/80**<br>80/90** | 30/30<br>30/30<br>34/38<br>47/53<br>59/67<br>72/82 | 187/187 |
|              | 460-3-60                        | 414              | 508 | 9.0                  | 62.0  | 0.8 | 3.4 | —<br>6.0<br>11.5<br>14.0<br>23.0<br>25.5                         | —<br>7.2<br>13.8<br>16.8<br>27.7<br>30.1                           | 15.5<br>15.5<br>21.5<br>25.3<br>38.8<br>41.8                               | 20<br>20<br>25<br>30<br>40<br>45                       | 15<br>15<br>20<br>23<br>36<br>38                   | 93      |
|              | 575-3-60                        | 518              | 632 | 7.1                  | 50.0  | 0.8 | 3.4 | —                                                                | —                                                                  | 12.2                                                                       | 15                                                     | 12                                                 | 75      |
| 072          | 208/230-3-60                    | 187              | 254 | 20.5                 | 156.0 | 1.4 | 7.5 | —<br>4.9/ 6.5<br>7.9/10.5<br>12.0/16.0<br>15.8/21.0<br>19.9/26.5 | —<br>13.6/15.6<br>21.9/25.3<br>33.4/38.5<br>43.8/50.5<br>55.2/63.8 | 30.6/30.6<br>34.5/34.5<br>36.7/40.9<br>51.1/57.5<br>64.1/72.5<br>78.4/89.1 | 35/35<br>40/40<br>45/45<br>60/60<br>70/80**<br>80/90** | 30/30<br>34/34<br>34/38<br>47/53<br>59/67<br>72/82 | 219/219 |
|              | 460-3-60                        | 414              | 508 | 9.6                  | 70.0  | 0.6 | 3.4 | —<br>6.0<br>11.5<br>14.0<br>23.0<br>25.5                         | —<br>7.2<br>13.8<br>16.8<br>27.7<br>30.7                           | 15.5<br>16.0<br>21.5<br>25.3<br>38.8<br>42.6                               | 20<br>20<br>25<br>30<br>40<br>45                       | 15<br>16<br>20<br>23<br>36<br>39                   | 101     |
|              | 575-3-60                        | 518              | 632 | 7.7                  | 56.0  | 0.6 | 3.4 | —                                                                | —                                                                  | 12.2                                                                       | 15                                                     | 12                                                 | 76      |

**NOTE:** See legend and notes on page 46.

# **ELECTRICAL DATA (cont)**

## **HIGH-STATIC MOTOR UNITS WITHOUT ELECTRICAL CONVENIENCE OUTLET (cont)**

| UNIT<br>551B | NOMINAL<br>VOLTAGE<br>(V-Ph-Hz) | VOLTAGE<br>RANGE |     | COMPRESSOR<br>(each) |       | OFM<br>(each) | IFM  | ELECTRIC HEAT                                                     |                                                                          | POWER SUPPLY                                                                        |                                                                         | MINIMUM UNIT<br>DISCONNECT<br>SIZE*                        |         |
|--------------|---------------------------------|------------------|-----|----------------------|-------|---------------|------|-------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------|---------|
|              |                                 | Min              | Max | RLA                  | LRA   | FLA           | FLA  | Nominal<br>kW†                                                    | FLA                                                                      | MCA                                                                                 | MOCP                                                                    | FLA                                                        | LRA     |
| 090††        | 208/230-3-60                    | 187              | 254 | 12.4                 | 88.0  | 1.4           | 10.6 | —<br>7.8/10.5<br>12.0/16.0<br>18.6/24.8<br>24.0/32.0<br>31.8/42.4 | —<br>21.7/ 25.0<br>33.4/ 38.5<br>51.7/ 59.7<br>66.7/ 77.0<br>88.4/102.0  | 41.3/ 41.3<br>41.3/ 44.5<br>54.9/ 61.4<br>77.9/ 87.8<br>96.6/109.5<br>123.7/140.8   | 45/ 45<br>50/ 50<br>60/ 70**<br>80/ 90**<br>100/110**<br>125/150**      | 44/ 44<br>44/ 44<br>44/ 44<br>51/ 56<br>89/101<br>114/129  | 270/270 |
|              | 460-3-60                        | 414              | 508 | 6.4                  | 44.0  | 0.7           | 4.8  | —<br>14.0<br>16.5<br>27.8<br>33.0<br>41.7                         | —<br>16.7<br>19.8<br>33.4<br>39.7<br>50.2                                | 20.6<br>26.9<br>30.8<br>47.8<br>55.6<br>68.7                                        | 25<br>30<br>35<br>50<br>60<br>70**                                      | 22<br>25<br>28<br>44<br>51<br>63                           | 134     |
|              | 575-3-60                        | 518              | 632 | 4.8                  | 34.0  | 0.7           | 4.8  | —<br>17.0<br>34.0                                                 | —<br>17.1<br>34.1                                                        | 15.8<br>27.4<br>48.6                                                                | 20<br>30<br>50                                                          | 17<br>25<br>45                                             | 97      |
| 102††        | 208/230-3-60                    | 187              | 254 | 15.0                 | 99.0  | 1.4           | 10.6 | —<br>7.8/10.5<br>12.0/16.0<br>18.6/24.8<br>24.0/32.0<br>31.8/42.4 | —<br>21.7/ 25.0<br>33.4/ 38.5<br>51.7/ 59.7<br>66.7/ 77.0<br>88.4/102.0  | 47.2/ 47.2<br>47.2/ 47.2<br>54.9/ 61.4<br>77.9/ 87.8<br>96.6/109.5<br>123.7/140.8   | 60/ 60<br>60/ 60<br>60/ 70<br>80/ 90<br>100/110<br>125/150              | 50/ 50<br>50/ 50<br>50/ 50<br>51/ 56<br>89/101<br>114/129  | 286/286 |
|              | 460-3-60                        | 414              | 508 | 8.2                  | 49.5  | 0.7           | 4.8  | —<br>14.0<br>16.5<br>27.8<br>33.0<br>41.7                         | —<br>16.7<br>19.8<br>33.4<br>39.7<br>50.2                                | 24.7<br>26.9<br>30.8<br>47.8<br>55.6<br>67.0                                        | 30<br>30<br>35<br>50<br>60<br>70                                        | 26<br>26<br>28<br>28<br>51<br>63                           | 145     |
|              | 575-3-60                        | 518              | 632 | 5.8                  | 40.0  | 0.7           | 4.8  | —<br>17.0<br>34.0                                                 | —<br>17.1<br>34.1                                                        | 18.1<br>26.1<br>47.5                                                                | 20<br>30<br>50                                                          | 19<br>24<br>44                                             | 116     |
| 120††        | 208/230-3-60                    | 187              | 254 | 17.3                 | 125.0 | 1.4           | 15.0 | —<br>7.8/10.5<br>12.0/16.0<br>24.0/32.0<br>31.8/42.4<br>37.5/50.0 | —<br>21.7/ 25.0<br>33.4/ 38.5<br>66.7/ 77.0<br>88.4/102.0<br>104.2/120.3 | 56.7/ 56.7<br>57.4/ 57.4<br>60.4/ 66.9<br>102.1/115.0<br>129.2/146.3<br>149.0/139.0 | 70/ 70**<br>70/ 70**<br>70/ 80**<br>110/125**<br>150/150**<br>150/150** | 61/ 61<br>61/ 61<br>61/ 62<br>94/106<br>119/135<br>137/156 | 361/361 |
|              | 460-3-60                        | 414              | 508 | 9.0                  | 62.0  | 0.7           | 7.4  | —<br>16.5<br>27.8<br>33.0<br>41.7<br>50.0                         | —<br>19.8<br>33.4<br>39.7<br>50.2<br>60.1                                | 29.1<br>34.1<br>51.0<br>58.9<br>71.9<br>84.4                                        | 35<br>40<br>60**<br>60**<br>70**<br>80**                                | 29<br>31<br>47<br>54<br>66<br>78                           | 181     |
|              | 575-3-60                        | 518              | 632 | 7.1                  | 50.0  | 0.7           | 7.4  | —<br>17.0<br>34.0<br>51.0                                         | —<br>17.1<br>34.1<br>51.2                                                | 23.0<br>28.7<br>50.1<br>58.6                                                        | 25<br>35<br>60<br>70**                                                  | 23<br>26<br>46<br>66                                       | 144     |

**NOTE:** See legend and notes on page 46.

# **ELECTRICAL DATA (cont)**

## **HIGH-STATIC MOTOR UNITS WITH ELECTRICAL CONVENIENCE OUTLET**

| UNIT<br>551B | NOMINAL<br>VOLTAGE<br>(V-Ph-Hz) | VOLTAGE<br>RANGE |     | COMPRESSOR |       | OFM | IFM | ELECTRIC HEAT                                                    |                                                                    | POWER SUPPLY                                                               |                                                                | MINIMUM UNIT<br>DISCONNECT<br>SIZE*                |                                                                |
|--------------|---------------------------------|------------------|-----|------------|-------|-----|-----|------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------|
|              |                                 | Min              | Max | RLA        | LRA   | FLA | FLA | Nominal<br>kW†                                                   | FLA                                                                | MCA                                                                        | MOCP                                                           | FLA                                                | LRA                                                            |
| 036          | 208/230-3-60                    | 187              | 254 | 10.3       | 77.0  | 0.7 | 5.8 | —<br>3.3/ 4.4<br>4.9/ 6.5<br>6.5/ 8.7<br>7.9/10.5<br>12.0/16.0   | —<br>9.2/10.6<br>13.6/15.6<br>18.1/20.9<br>21.9/25.3<br>33.4/38.5  | 25.4/25.4<br>25.4/25.5<br>29.2/31.8<br>34.9/38.4<br>39.6/43.8<br>53.9/60.4 | 30/30<br>30/30<br>35/35<br>40/40<br>40/45<br>60/70**           | 25/25<br>25/25<br>28/30<br>33/36<br>37/41<br>51/56 | 120/120<br>124/124<br>124/124<br>124/124<br>124/124<br>124/124 |
|              | 460-3-60                        | 414              | 508 | 5.1        | 39.0  | 0.4 | 2.6 | —<br>6.0<br>8.8<br>11.5<br>14.0                                  | —<br>6.0<br>8.8<br>13.8<br>16.8                                    | 12.1<br>14.9<br>19.2<br>23.2<br>27.0                                       | 15<br>20<br>20<br>25<br>30                                     | 12<br>14<br>18<br>21<br>25                         | 60<br>63<br>63<br>63<br>63                                     |
|              | 575-3-60                        | 518              | 632 | 4.2        | 31.0  | 0.4 | 2.6 | —                                                                | —                                                                  | 9.8                                                                        | 15                                                             | 11                                                 | 52                                                             |
|              | 208/230-3-60                    | 187              | 254 | 13.5       | 99.0  | 0.7 | 5.8 | —<br>4.9/ 6.5<br>6.5/ 8.7<br>12.0/16.0<br>15.8/21.0              | —<br>13.6/15.6<br>18.1/20.9<br>33.4/38.5<br>43.8/50.5              | 29.4/29.4<br>29.4/31.8<br>34.9/38.4<br>53.9/60.4<br>67.0/75.4              | 35/35<br>35/35<br>40/40<br>60/70**<br>70/80**                  | 29/29<br>29/30<br>33/36<br>51/56<br>63/70          | 146/146                                                        |
| 048          | 460-3-60                        | 414              | 508 | 7.4        | 49.5  | 0.4 | 2.6 | —<br>6.0<br>11.5<br>14.0<br>23.0                                 | —<br>7.2<br>13.8<br>16.8<br>27.7                                   | 15.0<br>15.6<br>23.2<br>27.0<br>40.5                                       | 20<br>20<br>25<br>30<br>45                                     | 14<br>14<br>21<br>25<br>37                         | 73                                                             |
|              | 575-3-60                        | 518              | 632 | 5.8        | 40.0  | 0.4 | 2.6 | —                                                                | —                                                                  | 11.8                                                                       | 15                                                             | 11                                                 | 58                                                             |
|              | 208/230-3-60                    | 187              | 254 | 17.3       | 123.0 | 1.5 | 7.5 | —<br>4.9/ 6.5<br>7.9/10.5<br>12.0/16.0<br>15.8/21.0<br>19.9/26.5 | —<br>13.6/15.6<br>21.9/25.3<br>33.4/38.5<br>43.8/50.5<br>55.2/63.8 | 36.6/36.6<br>36.6/36.6<br>41.7/45.9<br>56.1/62.5<br>69.1/77.5<br>83.4/94.1 | 40/ 40<br>40/ 40<br>40/ 50<br>60/ 70**<br>70/ 80**<br>90/100** | 36/36<br>36/36<br>39/43<br>53/58<br>65/72<br>78/87 | 192/192                                                        |
|              | 460-3-60                        | 414              | 508 | 9.0        | 62.0  | 0.8 | 3.4 | —<br>6.0<br>11.5<br>14.0<br>23.0<br>25.5                         | —<br>7.2<br>13.8<br>16.8<br>27.7<br>30.1                           | 18.2<br>18.2<br>24.2<br>28.0<br>41.5<br>44.5                               | 20<br>20<br>25<br>30<br>45<br>45                               | 18<br>18<br>22<br>26<br>38<br>41                   | 96                                                             |
| 060          | 575-3-60                        | 518              | 632 | 7.1        | 50.0  | 0.8 | 3.4 | —                                                                | —                                                                  | 14.4                                                                       | 20                                                             | 14                                                 | 77                                                             |
|              | 208/230-3-60                    | 187              | 254 | 20.5       | 156.0 | 1.4 | 7.5 | —<br>4.9/ 6.5<br>7.9/10.5<br>12.0/16.0<br>15.8/21.0<br>19.9/26.5 | —<br>13.6/15.6<br>21.9/25.3<br>33.4/38.5<br>43.8/50.5<br>55.2/63.8 | 40.5/40.5<br>40.5/40.5<br>41.7/45.9<br>56.1/62.5<br>69.1/77.5<br>83.4/94.1 | 45/ 45<br>45/ 45<br>45/ 50<br>60/ 70**<br>70/ 80**<br>90/100** | 39/39<br>39/39<br>39/43<br>53/58<br>65/72<br>78/87 | 224/224                                                        |
|              | 460-3-60                        | 414              | 508 | 9.6        | 70.0  | 0.6 | 3.4 | —<br>6.0<br>11.5<br>14.0<br>23.0<br>25.5                         | —<br>7.2<br>13.8<br>16.8<br>27.7<br>30.7                           | 18.7<br>18.7<br>24.2<br>28.0<br>41.5<br>45.3                               | 25<br>25<br>25<br>30<br>45<br>50                               | 18<br>18<br>22<br>26<br>38<br>42                   | 103<br>104<br>104<br>104<br>104<br>104                         |
|              | 575-3-60                        | 518              | 632 | 7.7        | 56.0  | 0.6 | 3.4 | —                                                                | —                                                                  | 15.0                                                                       | 20                                                             | 15                                                 | 89                                                             |

**NOTE:** See legend and notes on page 46.

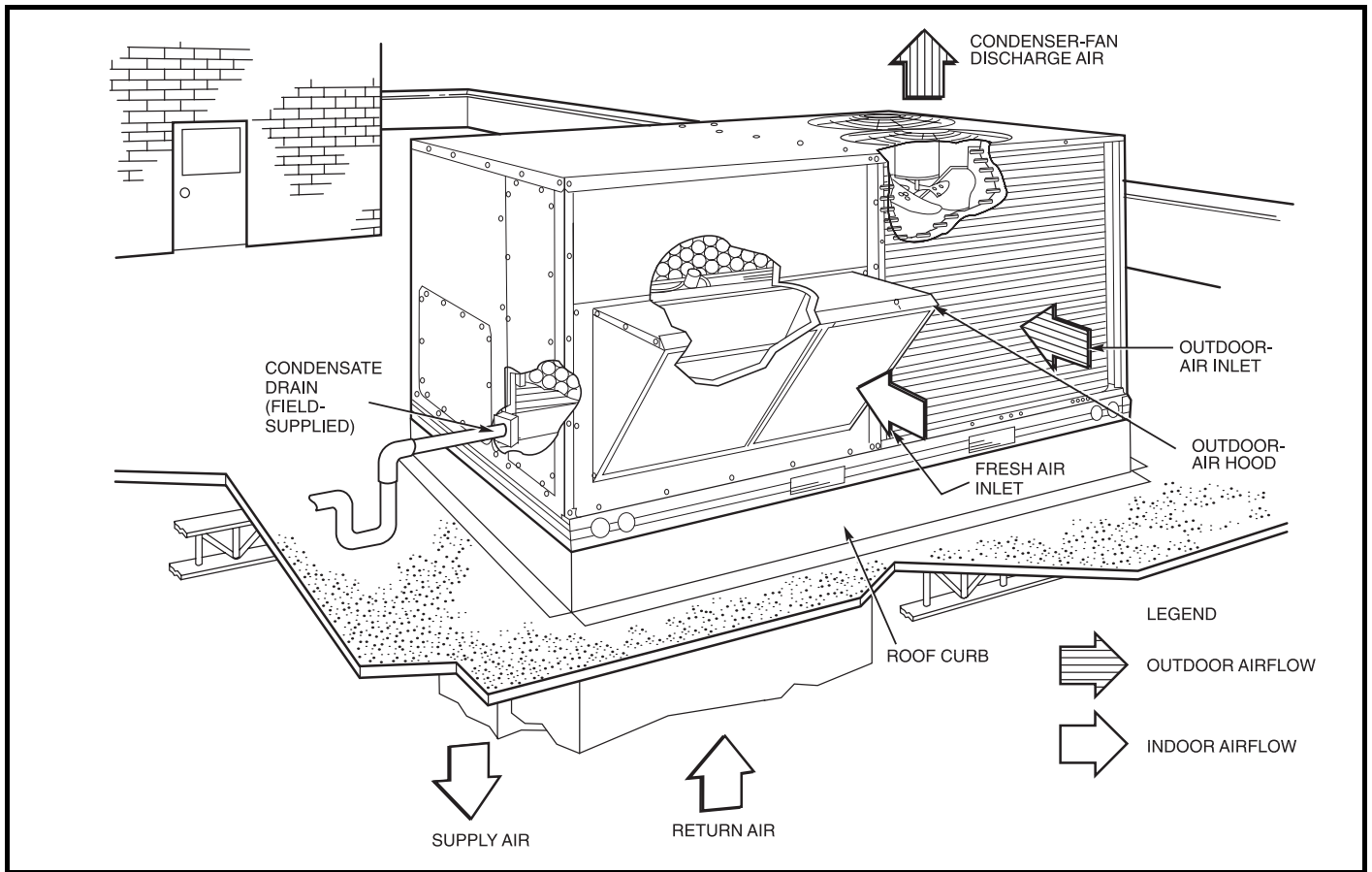
# **ELECTRICAL DATA (cont)**

## **HIGH-STATIC MOTOR UNITS WITH ELECTRICAL CONVENIENCE OUTLET (cont)**

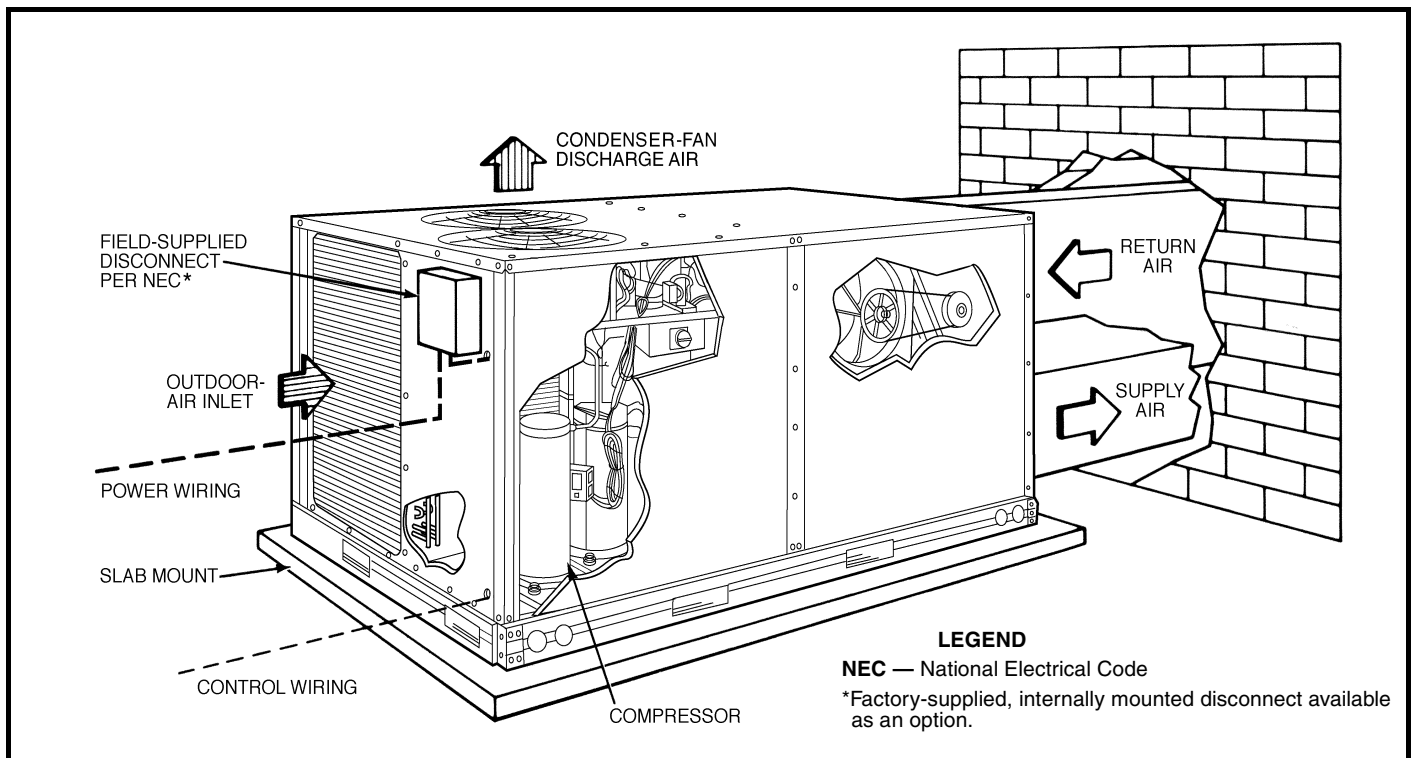
| UNIT<br>551B | NOMINAL<br>VOLTAGE<br>(V-Ph-Hz) | VOLTAGE<br>RANGE |     | COMPRESSOR<br>(each) |       | OFM<br>(each) | IFM  | ELECTRIC HEAT                                                     |                                                                          | POWER SUPPLY                                                                        |                                                                         | MINIMUM UNIT<br>DISCONNECT<br>SIZE*                        |                   |
|--------------|---------------------------------|------------------|-----|----------------------|-------|---------------|------|-------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------|-------------------|
|              |                                 | Min              | Max | RLA                  | LRA   | FLA           | FLA  | Nominal<br>kW†                                                    | FLA                                                                      | MCA                                                                                 | MOCP                                                                    | FLA                                                        | LRA               |
| 090††        | 208/230-3-60                    | 187              | 254 | 12.4                 | 88.0  | 1.4           | 10.6 | —<br>7.8/10.5<br>12.0/16.0<br>18.6/24.8<br>24.0/32.0<br>31.8/42.4 | —<br>21.7/ 25.0<br>33.4/ 38.5<br>51.7/ 59.7<br>66.7/ 77.0<br>88.4/102.0  | 47.3/ 47.3<br>47.3/ 50.0<br>59.9/ 66.4<br>82.9/ 92.8<br>101.6/114.5<br>128.7/145.8  | 50/ 50<br>60/ 60<br>70/ 70<br>90/100**<br>110/125**<br>150/150**        | 49/ 49<br>49/ 49<br>56/ 62<br>77/ 86<br>94/106<br>119/135  | 270/270           |
|              | 460-3-60                        | 414              | 508 | 6.4                  | 44.0  | 0.7           | 4.8  | —<br>14.0<br>16.5<br>27.8<br>33.0<br>41.7                         | —<br>16.7<br>19.8<br>33.4<br>39.7<br>50.2                                | 23.3<br>29.5<br>33.5<br>50.4<br>58.3<br>71.3                                        | 25<br>30<br>35<br>60<br>60<br>80                                        | 24<br>27<br>31<br>46<br>54<br>66                           |                   |
|              | 575-3-60                        | 518              | 632 | 4.8                  | 34.0  | 0.7           | 4.8  | —<br>17.0<br>34.0                                                 | —<br>17.1<br>34.1                                                        | 18.5<br>27.4<br>48.6                                                                | 20<br>30<br>50                                                          | 20<br>25<br>45                                             | 119<br>119<br>119 |
| 102††        | 208/230-3-60                    | 187              | 254 | 15.0                 | 99.0  | 1.4           | 10.6 | —<br>7.8/10.5<br>12.0/16.0<br>18.6/24.8<br>24.0/32.0<br>31.8/42.4 | —<br>21.7/ 25.0<br>33.4/ 38.5<br>51.7/ 59.7<br>66.7/ 77.0<br>88.4/102.0  | 53.2/ 53.2<br>53.2/ 53.2<br>59.9/ 66.4<br>82.9/ 92.8<br>101.6/114.5<br>128.7/145.8  | 60/ 60<br>60/ 60<br>70/ 70<br>90/100<br>110/125<br>150/150              | 55/ 55<br>55/ 55<br>56/ 62<br>77/ 86<br>94/106<br>119/135  | 290               |
|              | 460-3-60                        | 414              | 508 | 8.2                  | 49.5  | 0.7           | 4.8  | —<br>14.0<br>16.5<br>27.8<br>33.0<br>41.7                         | —<br>16.7<br>19.8<br>33.4<br>39.7<br>50.2                                | 27.4<br>29.5<br>33.4<br>50.4<br>58.3<br>67.0                                        | 30<br>30<br>35<br>60<br>60<br>80                                        | 28<br>28<br>31<br>46<br>54<br>66                           |                   |
|              | 575-3-60                        | 518              | 632 | 5.8                  | 40.0  | 0.7           | 4.8  | —<br>17.0<br>34.0                                                 | —<br>17.1<br>34.1                                                        | 20.7<br>28.8<br>50.1                                                                | 25<br>30<br>60                                                          | 21<br>26<br>46                                             | 119               |
| 120††        | 208/230-3-60                    | 187              | 254 | 17.3                 | 125.0 | 1.4           | 15.0 | —<br>7.8/10.5<br>12.0/16.0<br>24.0/32.0<br>31.8/42.4<br>37.5/50.0 | —<br>21.7/ 25.0<br>33.4/ 38.5<br>66.7/ 77.0<br>88.4/102.0<br>104.2/120.3 | 62.7/ 62.7<br>63.4/ 63.4<br>65.4/ 71.9<br>107.1/120.0<br>134.2/151.3<br>149.0/144.0 | 70/ 70**<br>70/ 70**<br>70/ 80**<br>110/125**<br>150/175**<br>175/150** | 66/ 66<br>66/ 66<br>66/ 67<br>99/111<br>124/140<br>143/161 | 365/365           |
|              | 460-3-60                        | 414              | 508 | 9.0                  | 62.0  | 0.7           | 7.4  | —<br>16.5<br>27.8<br>33.0<br>41.7<br>50.0                         | —<br>19.8<br>33.4<br>39.7<br>50.2<br>60.1                                | 31.8<br>36.8<br>53.8<br>61.6<br>74.7<br>84.4                                        | 35<br>40<br>60**<br>70**<br>70**<br>80**                                | 32<br>34<br>49<br>57<br>69<br>80                           |                   |
|              | 575-3-60                        | 518              | 632 | 7.1                  | 50.0  | 0.7           | 7.4  | —<br>17.0<br>34.0<br>51.0                                         | —<br>17.1<br>34.1<br>51.2                                                | 25.7<br>31.4<br>52.7<br>61.1                                                        | 30<br>35<br>60<br>70*                                                   | 25<br>28<br>48<br>68                                       |                   |

**NOTE:** See legend and notes on page 46.

## TYPICAL PIPING AND WIRING



**Vertical Discharge Ducting**



**Horizontal Discharge Ducting**

## CONTROLS

### OPERATING SEQUENCE — 551B036-072 UNITS

**Cooling, Units Without Economizer** — When the thermostat calls for cooling, terminals G and Y1 are energized. The indoor (evaporator) fan contactor (IFC), and compressor contactor no. 1 (C1) are energized and the indoor (evaporator) fan motor (IFM), compressor no. 1, and condenser fan start. The outdoor (condenser) fan motor (OFM) runs continuously while unit is cooling.

**Cooling, Units With Durablade Economizer** — When the outdoor-air temperature is above the outdoor-air temperature (OAT) setting and the room thermostat calls for cooling, the compressor contactor is energized to start the compressor and outdoor (condenser) fan motor (OFM). The indoor (evaporator) fan motor (IFM) is energized and the economizer damper moves to the minimum position. After the thermostat is satisfied, the damper moves to the fully closed position when IFM is deenergized.

When the outdoor-air temperature is below the OAT setting and the thermostat calls for Y1 and G (cooling), the economizer damper moves to the minimum position when the evaporator fan starts. The first stage of cooling is provided by the economizer. If the supply-air temperature is above 57 F, a switch on the supply-air thermostat is closed between the T2 terminal and the 24 vac terminal. This causes the damper to continue to modulate open until the supply-air temperature falls below 55 F or the damper reaches the fully open position.

When the supply-air temperature is between 55 F and 52 F, the supply-air thermostat has open switches between the T2 and 24 vac terminals and between the T1 and 24 vac terminals. This causes the economizer damper to remain in an intermediate open position.

If the supply-air temperature falls below 52 F, a switch on the supply-air thermostat is closed between the T1 terminal and the 24 vac terminal. This causes the damper to modulate closed until the supply-air temperature rises above 55 F or the damper reaches the minimum position.

When the supply-air temperature is between 55 F and 57 F, the supply-air thermostat has open switches between the T2 and 24 vac terminals. This causes the economizer damper to remain in an intermediate open position.

If the outdoor air alone cannot satisfy the cooling requirements of the conditioned space, economizer cooling is integrated with mechanical cooling, providing second stage cooling. The compressor and condenser fan will be energized and the position of the economizer damper will be determined by the supply-air temperature.

When the second stage of cooling is satisfied, the compressor and OFM will be deenergized. The damper position will be determined by the supply-air temperature.

When the first stage of cooling is satisfied, there is a 30-second delay before the evaporator fan shuts off on 048-060 units. The damper will move to fully closed position.

**Cooling, Units With EconoMi\$er** — When the outdoor-air temperature (OAT) is above the ECON SP set point and the room thermostat calls for Stage 1 cooling (R to G + Y1), the indoor (evaporator) fan motor (IFM) is energized and the EconoMi\$er damper modulates to minimum position. The compressor contactor is energized to start the compressor and outdoor (condenser) fan motor (OFM). After the thermostat is satisfied, the damper modulates to the fully closed position when the IFM is deenergized.

When the OAT is below the ECON SP setting and the room thermostat calls for Stage 1 cooling (R to G + Y1), the EconoMi\$er modulates to the minimum position when the IFM is energized. The EconoMi\$er provides Stage 1 of cooling by

modulating the return and outdoor air dampers to maintain a 55 F supply air set point. If the supply-air temperature (SAT) is greater than 57 F, the EconoMi\$er modulates open, allowing a greater amount of outdoor air to enter the unit. If the SAT drops below 53 F, the outdoor air damper modulates closed to reduce the amount of outdoor air. When the SAT is between 53 and 57 F, the EconoMi\$er maintains its position.

If outdoor air alone cannot satisfy the cooling requirements of the conditioned space, and the OAT is above the MECH CLG LOCKOUT set point, the EconoMi\$er integrates free cooling with mechanical cooling. This is accomplished by the strategies below.

**NOTE:** Compressor has a 2-minute Minimum On, Minimum Off, and Interstage delay timer.

1. If Y1 is energized, and the room thermostat calls for Y2 (2-stage thermostat), the compressor and OFM are energized. The position of the EconoMi\$er damper is maintained at its current value.
2. If Y1 is energized for more than 20 minutes, and Y2 is not energized (whether or not a 2-stage thermostat is used), the compressor and OFM are energized. The position of the EconoMi\$er damper is maintained at its current value.
3. If Y1 is energized, and the compressor is already energized (see Step 2) and the room thermostat calls for Y2, the compressor continues to operate.
4. If the compressor is energized and the thermostat is satisfied, the compressor, the OFM, and IFM are deenergized and the EconoMi\$er modulates closed.

When the OAT is below the MECH CLG LOCKOUT set point, the compressors remain off.

**Heating, Units Without Economizer** — Upon a call for heating through W1, indoor (evaporator) fan contactor (IFC) and heater contactor no. 1 (HC1) are energized. On units equipped for 2 stages of heat, when additional heat is needed, heater contactor no. 2 is energized through W2.

**Heating, Units With Economizer** — When the room temperature calls for heat through terminal W1, the indoor (evaporator) fan contactor (IFC) and heater contactor no. 1 (HC1) are energized. On units equipped for 2 stages of heat, when additional heat is needed, heater contactor no. 2 is energized through W2. The economizer damper moves to the minimum position. When the thermostat is satisfied, the damper moves to the fully closed position.

### OPERATING SEQUENCE — 551B090-150 UNITS

**Cooling, Units Without Economizer** — When the thermostat calls for cooling, terminals G and Y1 are energized. The indoor (evaporator) fan contactor (IFC), compressor contactor no. 1 (C1) and outdoor fan contactor (OFC) are energized and the indoor (evaporator) fan motor (IFM), compressor no. 1, and condenser fans start. The outdoor (condenser) fan motors (OFM) run continuously while unit is cooling. If the thermostat calls for a second stage of cooling by energizing Y2, compressor contactor no. 2 (C2) is energized and compressor no. 2 starts.

**Cooling, Units With Durablade Economizer** — When the outdoor-air temperature is above the outdoor-air temperature (OAT) setting and the room thermostat calls for cooling, the compressor contactor no. 1 is energized to start compressor no. 1 and outdoor (condenser) fan motors (OFM). The indoor (evaporator) fan motor (IFM) is energized and the economizer damper moves to the minimum position. Upon a further call for cooling, compressor contactor no. 2 will be energized, starting compressor no. 2. After the thermostat is satisfied and the IFM is deenergized, the damper moves to the fully closed position.

## CONTROLS (cont)

When the outdoor-air temperature is below the OAT setting and the thermostat calls for Y1 and G (cooling), the economizer damper moves to the minimum position when the evaporator fan starts. The first stage of cooling is provided by the economizer. If the supply-air temperature is above 57 F, a switch on the supply-air thermostat is closed between the T2 terminal and the 24 vac terminal. This causes the damper to continue to modulate open until the supply-air temperature falls below 55 F or the damper reaches the fully open position.

When the supply-air temperature is between 55 F and 52 F, the supply-air thermostat has open switches between the T2 and 24 vac terminals and between the T1 and 24 vac terminals. This causes the economizer damper to remain in an intermediate open position.

If the supply-air temperature falls below 52 F, a switch on the supply-air thermostat is closed between the T1 terminal and the 24 vac terminal. This causes the damper to modulate closed until the supply-air temperature rises above 55 F or the damper reaches the minimum position.

When the supply-air temperature is between 55 F and 57 F, the supply-air thermostat has open switches between the T2 and 24 vac terminals. This causes the economizer damper to remain in an intermediate open position.

If the outdoor air alone cannot satisfy the cooling requirements of the conditioned space, economizer cooling is integrated with mechanical cooling, providing second stage cooling. Compressor no. 1 and condenser fans will be energized, and the position of the economizer damper will be determined by the supply-air temperature. Compressor no. 2 is locked out.

When the second stage of cooling is satisfied, the compressor and OFMs will be deenergized. The damper position will be determined by the supply-air temperature.

When the first stage of cooling is satisfied, the IFM shuts off and the damper will move to fully closed position.

**Cooling, Units With EconoMi\$er** — When the outdoor-air temperature (OAT) is above the ECON SP set point and the room thermostat calls for Stage 1 cooling (R to G + Y1), the indoor (evaporator) fan motor (IFM) is energized and the EconoMi\$er damper modulates to minimum position. The compressor contactor is energized to start the compressor and outdoor (condenser) fan motor (OFM). After the thermostat is satisfied, the damper modulates to the fully closed position when the IFM is deenergized.

When the OAT is below the ECON SP setting and the room thermostat calls for Stage 1 cooling (R to G + Y1), the EconoMi\$er modulates to the minimum position when the IFM is energized. The EconoMi\$er provides Stage 1 of cooling by modulating the return and outdoor air dampers to maintain a 55 F supply air set point. If the supply-air temperature (SAT) is greater than 57 F, the EconoMi\$er modulates open, allowing a greater amount of outdoor air to enter the unit. If the SAT drops below 53 F, the outdoor air damper modulates closed to reduce the amount of outdoor air. When the SAT is between 53 and 57 F, the EconoMi\$er maintains its position.

If outdoor air alone cannot satisfy the cooling requirements of the conditioned space, and the OAT is above the MECH CLG LOCKOUT set point, the EconoMi\$er integrates free cooling with mechanical cooling. This is accomplished by the strategies below.

**NOTE:** Compressor has a two-minute Minimum On, Minimum Off, and Interstage delay timer.

1. If Y1 is energized, and the room thermostat calls for Y2 (2-stage thermostat), compressor no. 1 and OFM are energized. The position of the EconoMi\$er damper is maintained at its current value.

2. If Y1 is energized for more than 20 minutes, and Y2 is not energized (whether or not a 2-stage thermostat is used), compressor no. 1 and OFM are energized. The position of the EconoMi\$er damper is maintained at its current value.
3. If Y1 is energized, and compressor no. 1 is already energized (see Step 2) and the room thermostat calls for Y2, the compressor continues to operate. If Y2 remains energized for more than 20 minutes, compressor no. 2 is energized.

**NOTE:** Compressor no. 2 cannot be energized unless there is a signal for Y2 from the space thermostat.

4. If compressor no. 2 is energized, and the Y2 signal from the thermostat is satisfied, compressors 1 and 2 are deenergized. Reasserting Y2 will start compressor no. 1 and (after a 20-minute interstage delay) compressor no. 2.
5. If compressor no. 1 is energized and the thermostat is satisfied, compressor no. 1, the OFM, and IFM are deenergized and the EconoMi\$er modulates closed.

When the OAT is below the MECH CLG LOCKOUT set point, the compressors remain off.

**Heating, Units Without Economizer** — Upon a call heating through terminal W1, indoor (evaporator) fan contactor (IFC) and heater contactor no. 1 (HC1) are energized. On units equipped for 2 stages of heat, when additional heat is needed, HC2 is energized through W2.

**Heating, Units With Economizer** — When the room thermostat calls for heat through terminal W1, the indoor (evaporator) fan contactor (IFC) and heater contactor no. 1 (HC1) are energized. On units equipped for 2 stages of heat, when additional heat is needed, HC2 is energized through W2. The economizer damper moves to the minimum position. When the thermostat is satisfied, the damper moves to the fully closed position.

**OPERATING SEQUENCE — UNITS WITH PERFECT HUMIDITY™ DEHUMIDIFICATION PACKAGE** — When thermostat calls for cooling, terminals G and Y1 and/or Y2 and the compressor contactor(s) C1 (and C2) are energized. The indoor (evaporator) fan motor (IFM), compressor(s), and outdoor (condenser) fan motor(s) (OFM) start. The OFM(s) runs continuously while the unit is in cooling. As shipped from the factory, dehumidification circuit is always energized. If Perfect Humidity circuit modulation is desired, a field-installed, wall-mounted humidistat or light commercial thermidstat is required.

If the Perfect Humidity humidistat is installed and calls for the Perfect Humidity subcooler coil to operate, the humidistat internal switch closes. This energizes and closes the liquid line solenoid valve coil(s) (LLSV) of the Perfect Humidity circuit, forcing the hot liquid refrigerant of the liquid line to enter the subcooler coil (see Dehumidification Option diagram on page 58). As the hot liquid passes through the subcooler coil, it is exposed to the cold supply airflow coming off from the evaporator coil and the liquid is further cooled to a temperature approaching the evaporator coil leaving-air temperature. The state of the refrigerant leaving the subcooler coil is a highly subcooled liquid refrigerant. The liquid then enters a thermostatic expansion valve (TXV) where the liquid is dropped to a lower pressure. The TXV does not have a pressure drop great enough to change the liquid to a 2-phase fluid. The TXV can throttle the pressure drop of the liquid refrigerant and maintain proper conditions at the compressor suction valve over a wide range of operating conditions. The liquid then enters a second fixed restrictor expansion device for a second pressure drop to a 2-phase fluid. The liquid proceeds to the evaporator coil at a temperature lower than normal cooling operation. This lower temperature is what increases the latent capacity of the rooftop. The 2-phase refrigerant passes through the evaporator and is changed into a vapor. The air passing over the evaporator coil will become colder than during normal operation as a result of the colder refrigerant temperatures. However, as it passes over the subcooler coil, the air will be warmed slightly.

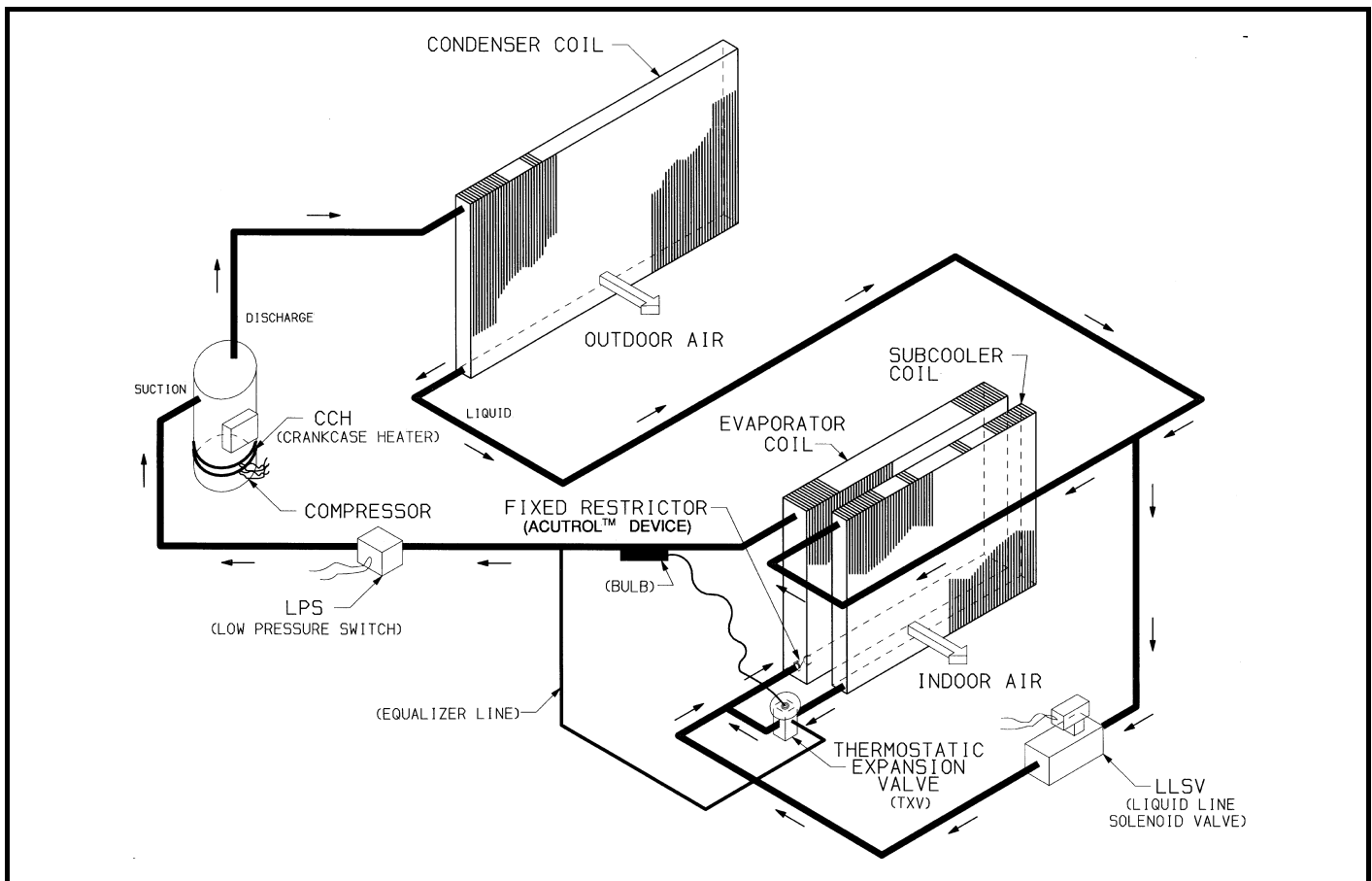
## CONTROLS (cont)

As the refrigerant leaves the evaporator, the refrigerant passes a low-pressure switch in the suction line. This low-pressure switch will de-activate the Perfect Humidity™ package when the suction pressure reaches 60 psig. The low-pressure switch is an added safety device to protect against evaporator coil freeze-up. The low-pressure switch will only de-activate and open the liquid line solenoid valve in the Perfect Humidity circuit. The compressors will continue to run as long as there is a call for cooling, regardless of the position of the low-pressure switch. The solenoid valve and the Perfect Humidity package will be re-activated only when the call for cooling has been satisfied, the low-pressure switch has closed, and a new call for

cooling exists. The crankcase heaters on the scroll compressors provide additional protection for the compressors due to the additional refrigerant charge in the subcooler.

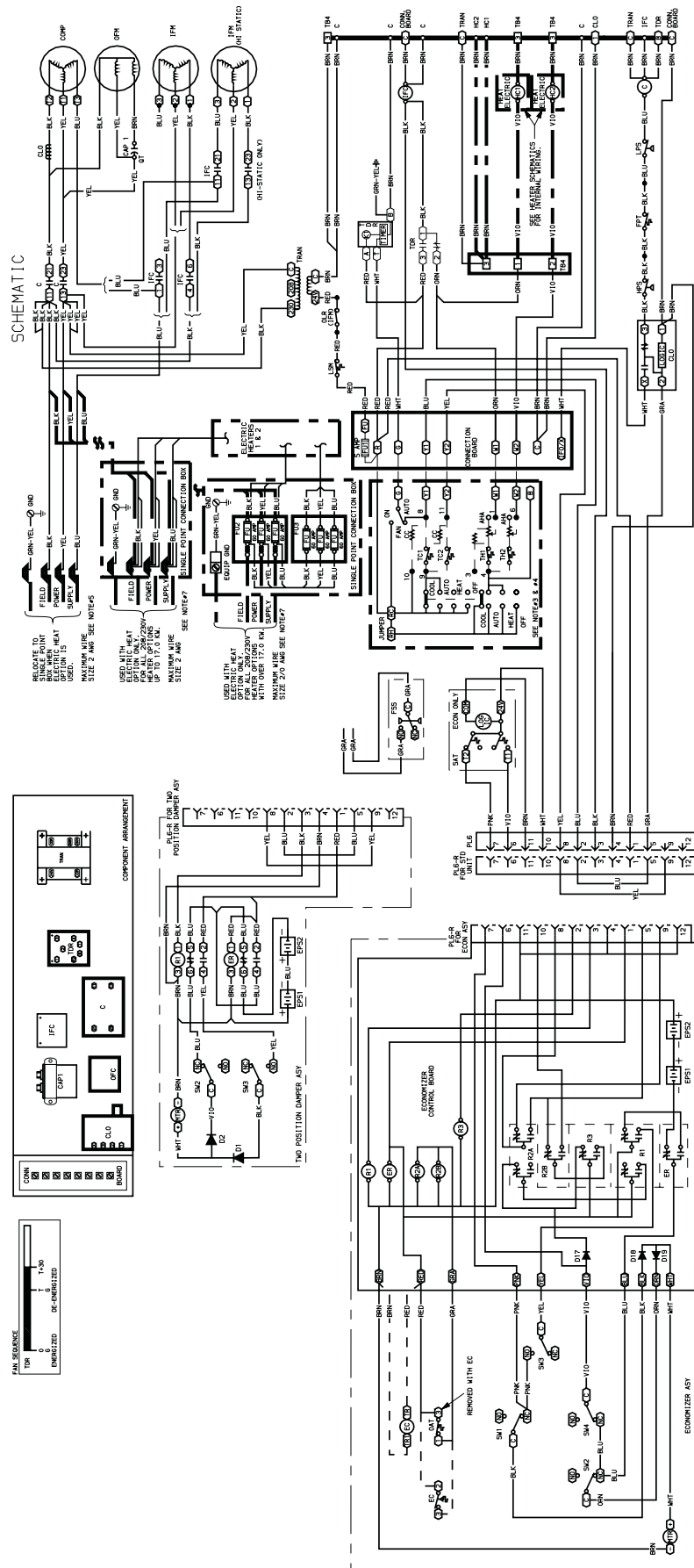
When the humidistat is satisfied, the humidistat internal switch opens, cutting power to and opening the LLSV. The refrigerant is routed back through the evaporator and the subcooler coil is removed from the refrigerant loop.

When the thermostat is satisfied, C1 (and C2) is deenergized and the compressor(s) and OFM(s) shut off. After a 30-second delay, the IFM shuts off. If the thermostat fan selector switch is in the ON position, the IFM will run continuously.

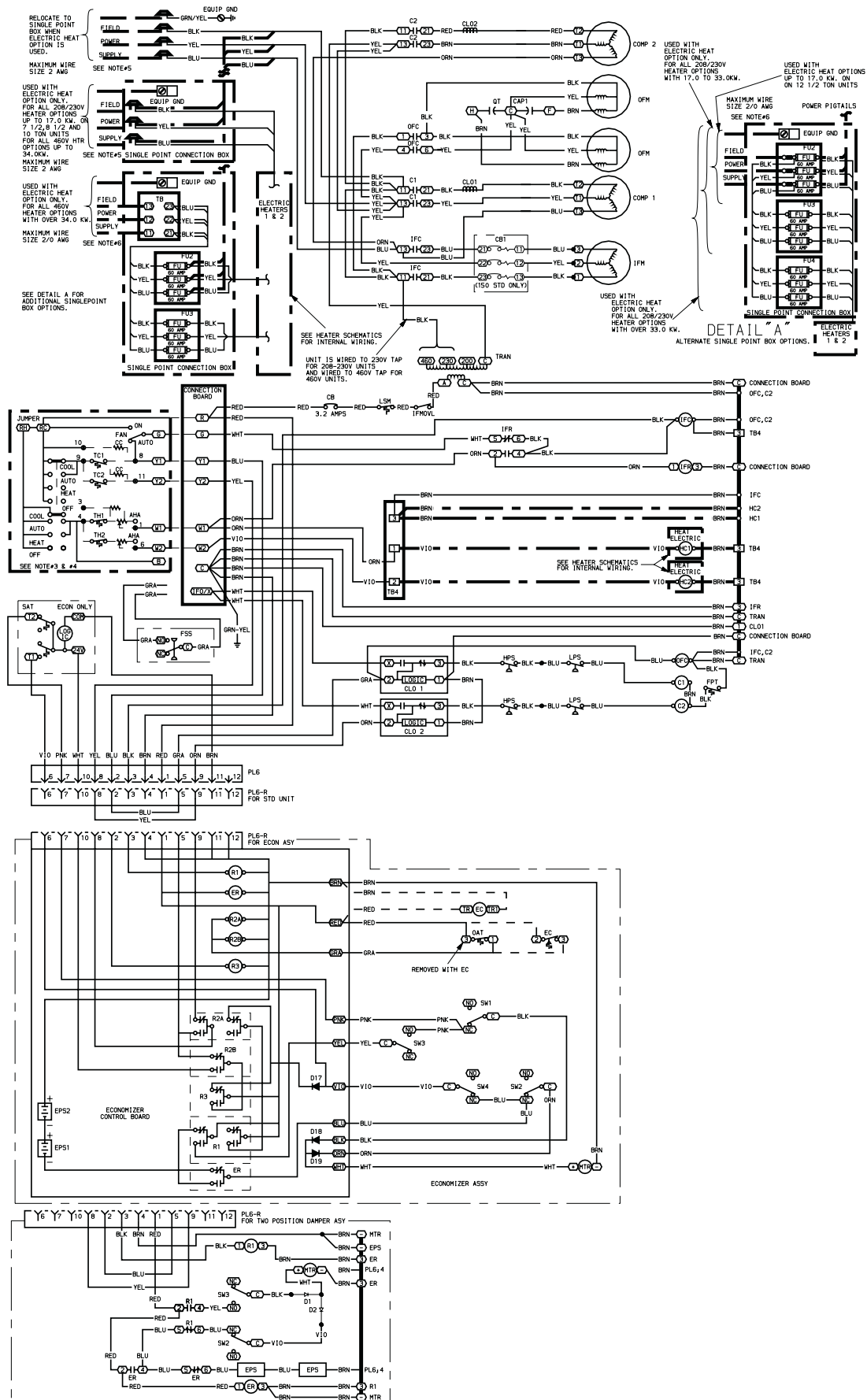


**Perfect Humidity Dehumidification Option**

## TYPICAL WIRING SCHEMATIC (SINGLE FAN UNITS)



# TYPICAL WIRING SCHEMATIC (TWO-FAN UNITS)



## TYPICAL WIRING SCHEMATIC (cont)

|       |                                      |
|-------|--------------------------------------|
| AHA   | Adjustable Heat Anticipator          |
| AWG   | American Wire Gauge                  |
| C     | Contact, Compressor                  |
| CAP   | Capacitor                            |
| CB    | Circuit Breaker                      |
| CC    | Cooling Compensator                  |
| CLO   | Compressor Lockout                   |
| COMP  | Compressor Motor                     |
| D     | Diode                                |
| EC    | Enthalpy Control                     |
| ECON  | Economizer                           |
| EPS   | Emergency Power Supply (9-v Battery) |
| EQUIP | Equipment                            |
| ER    | Economizer Relay                     |
| FPT   | Freeze Protection Thermostat         |
| FSS   | Filter Status Switch                 |
| FU    | Fuse                                 |
| GND   | Ground                               |
| HC    | Heater Contactor                     |
| HPS   | High-Pressure Switch                 |
| IFC   | Indoor (Evaporator) Fan Contactor    |
| IFM   | Indoor (Evaporator) Fan Motor        |
| IFR   | Indoor (Evaporator) Fan Relay        |
| LPS   | Low-Pressure Switch                  |
| LSM   | Limit Switch (Manual Reset)          |
| MTR   | Motor                                |
| OAT   | Outdoor-Air Thermostat               |
| OFC   | Outdoor (Condenser) Fan Contactor    |
| OFM   | Outdoor (Condenser) Fan Motor        |
| OLR   | Overload Relay                       |
| P     | Plug                                 |
| PL    | Plug Assembly                        |
| QT    | Quadruple Terminal                   |

|                                                                                   |                                                             |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|
| R                                                                                 | Relay                                                       |
| SAT                                                                               | Supply-Air Thermostat                                       |
| SW1                                                                               | Switch Fully Open                                           |
| SW2                                                                               | Switch Fully Closed                                         |
| SW3                                                                               | Switch Minimum Vent Position                                |
| SW4                                                                               | Switch Maximum Vent Position                                |
| TB                                                                                | Terminal Block                                              |
| TC                                                                                | Thermostat-Cooling                                          |
| TDR                                                                               | Time-Delay Relay                                            |
| TH                                                                                | Thermostat-Heating                                          |
| TRAN                                                                              | Transformer                                                 |
|  | Field Splice                                                |
|  | Marked Wire                                                 |
|  | Terminal (Marked)                                           |
|  | Terminal (Unmarked)                                         |
|  | Terminal Block                                              |
|  | Splice                                                      |
|  | Splice (Marked)                                             |
|  | Factory Wiring                                              |
|  | Field Control Wiring                                        |
|  | Field Power Wiring                                          |
|  | Accessory or Optional Wiring                                |
|  | To indicate common potential only. Not to represent wiring. |

### NOTES:

- If any of the original wire furnished must be replaced, it must be replaced with type 90° C wire or its equivalent.
- Three-phase motors are protected under primary single-phasing conditions.
- Thermostat: HH07AT170,172  
Subbase: HH93AZ176,177,178, and 179
- Single-Fan Units:**  
Set heat anticipator at .8 amp for first stage, and .3 amp for second stage.  
**Two-Fan Units:**  
Set heat anticipator at 1 amp.
- Use copper conductors only.
- Single-Fan Units:**  
TRAN is wired for 230-v unit. If unit is to be run with 208-v power supply, disconnect BLK wire from 230-v tap (ORN) and connect to 208-v tap (RED). Insulate end of 230-v tap.  
**Two-Fan Units:**  
Use copper, copper-clad aluminum, or aluminum conductors.
- Single-Fan Units:**  
Use copper, copper-clad aluminum, or aluminum conductors.  
**Two-Fan Units:**  
TRAN is wired for 230-v unit. If unit is to be run with 208-v power supply, disconnect BLK wire from 230-v tap (ORN) and connect to 208-v tap (RED). Insulate end of 230-v tap.

## APPLICATION DATA

- CONDENSATE DRAIN PAN** — A sloped condensate drain pan is supplied on all units. The condensate drain pan must be externally trapped. Condensate drains are located on both the bottom and end of the unit. The bottom drain can be used for thru-the-curb connections.
- DUCTWORK** — All ductwork must be attached to flanges. If no flanges are present, they must be field supplied. Secure vertical discharge ductwork to roof curb. For horizontal discharge applications, attach ductwork to flanges. Field supplied flanges can be attached to horizontal discharge openings and all ductwork attached to flanges.
- TO CONVERT FROM VERTICAL DISCHARGE TO HORIZONTAL DISCHARGE (DURABLADE ECONOMIZER ONLY):**
  - Remove economizer or two-position damper to gain access to return duct opening.
  - Move the horizontal-discharge duct opening covers to the vertical discharge openings.
  - Rotate economizer or two-position damper 90 degrees (until the motor faces the condenser section).
  - Rotate the barometric relief damper 90 degrees.
  - Install block-off plate over the opening on the access panel.
- THRU-THE-BOTTOM SERVICE CONNECTIONS** — Thru-the-bottom connections allow field power wires and control wires to enter through the basepan.
- THERMOSTAT** — Use of 2-stage cooling thermostat is recommended for all units equipped with economizer.
- HEATING-TO-COOLING CHANGEOVER** — All units are automatic changeover from heating to cooling when automatic changeover thermostat and subbase are used.
- AIRFLOW** — Units are draw-thru on cooling and blow-thru on heating.

- MAXIMUM AIRFLOW** — To minimize possibility of condensate blow-off from evaporator, airflow through units should not exceed 500 cfm/ton.
- MINIMUM AIRFLOW** — Minimum airflow for cooling is 300 cfm/ton. For units with electric heating, required minimum cfm is 900 for 551B036; 1200 for 551B048; 1500 for 551B060; 1800 for 551B072; 2250 for 551B090; 2500 for 551B102; 3000 for 551B120; and 4000 for the 551B150, with the following exceptions:

| UNIT 551B | UNIT VOLTAGE | HEATER kW | UNIT CONFIGURATION     | REQUIRED MINIMUM CFM |
|-----------|--------------|-----------|------------------------|----------------------|
| 120       | 208/230      | 42.4      | Horizontal             | 3200                 |
|           | 208/230      | 50.0      | Horizontal             | 3200                 |
|           | 460          | 50.0      | Horizontal or Vertical | 3200                 |
| 090-150   | 575          | 17.0      | Horizontal or Vertical | 2800                 |
|           |              | 34.0      |                        | 2350                 |

- MINIMUM AMBIENT OPERATING TEMPERATURE** — Minimum operating temperature for size 036-150 standard units is 25 F. With accessory Motormaster® or Motormaster IV control, units can operate at outdoor temperatures down to -20 F.
- MAXIMUM OPERATING OUTDOOR-AIR TEMPERATURE** — Maximum outdoor-air operating temperature for cooling is 125 F.
- MOTOR DATA** — Due to Bryant's internal unit design (draw-thru over the motor), air path, and specially designed motors, the full horsepower (maximum continuous bhp) listed in the Physical Data table and in each Fan Performance table can be utilized with extreme confidence.

Using Bryant motors to the values listed in the Physical Data, Fan Performance, and Evaporator-Fan Motor Data tables *will not* result in nuisance tripping or premature motor failure. In addition, the unit warranty will not be affected.

## APPLICATION DATA (cont)

### 13. PERFECT HUMIDITY™ DEHUMIDIFICATION PACKAGE

— This option provides greater dehumidification by further subcooling the hot liquid refrigerant leaving the condenser coil. The Perfect Humidity package consists of a subcooling coil located on the leaving-air side of the evaporator coil. The location of the coil in the indoor airstream enhances the latent capacity of the 551B rooftop units by up to 40%.

Many buildings suffer damage or have poor indoor-air quality due to overly humid conditions. Building humidity must be controlled for the following reasons:

- a. **INDOOR-AIR QUALITY** — Humidity is a major factor in the growth and propagation of mold and mildew in a building. The mold and mildew can spread quickly and grow in carpets and ductwork and on walls, and often causes cases of sick building syndrome. This syndrome can lead to employee absenteeism due to illness, lower worker productivity, and increased health care costs. The American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) recommends that relative humidity levels in buildings be maintained below 70%.
- b. **COMFORT LEVELS** — High humidity levels cause the occupied space to become uncomfortable, because humidity interferes with the body's natural cooling process (evaporation at the skin surface).
- c. **HUMIDITY DAMAGE** — Humidity causes property damage, such as stained wallpaper and ceiling tiles. Humidity can also damage books and artwork, and create strong odors in carpets. In addition, humidity can contribute to unacceptable product quality in industrial processes.
- d. **IMPROPER VENTILATION** — Buildings in hot and humid geographical areas cannot be properly ventilated due to high humidity levels outdoors, resulting in poor indoor-air quality.
- e. **EQUIPMENT INEFFICIENCY** — Humidity can cause inefficient operation of refrigerators and freezers.
- f. **INCREASED ENERGY COSTS** — Because of high humidity levels and less comfortable conditions, thermostat set points are lowered to force the HVAC (heating, ventilation, and air conditioning) equipment to run longer and work harder to lower the humidity levels. Also, in an attempt to control humidity, system designers typically oversize HVAC equipment and add reheat capability to get the desired latent capacity. This results in higher initial equipment costs, as well as increased energy expenses throughout the life of the unit.

#### Applications

There are many different rooftop unit applications that are susceptible to problems caused by high humidity levels. Some common applications include:

- a. **RESTAURANTS** — The kitchen areas of restaurants have many humidity-producing activities, such as dish washing and cooking.
- b. **SUPERMARKETS** — High humidity levels cause inefficiency in operation of refrigeration and freezer systems.
- c. **MUSEUMS AND LIBRARIES** — Humidity can damage books and artwork.
- d. **GYMNASIUMS, LOCKER ROOMS, AND HEALTH CLUBS** — Shower areas and human perspiration cause uncomfortable occupied space conditions.
- e. **HOT AND HUMID CLIMATES** — The southeastern United States is a good example of this application. The Perfect Humidity dehumidification package becomes particularly useful when increased amounts of the hot

and humid outdoor air need to be brought into the building for proper ventilation.

14. **PERFECT HUMIDITY DEHUMIDIFICATION PACKAGE DESIGN EFFECTS** — To fully understand the operation of the Perfect Humidity dehumidification package, refer to the pressure enthalpy curve, and analyze the Perfect Humidity package effects on the refrigerant in the rooftop unit. The pressure enthalpy curve shows the refrigerant cycle for a 551B rooftop unit.

#### Standard Unit Refrigerant Cycle

At point no. 1 in the pressure enthalpy curve, vapor leaving the compressor at a high pressure and a high temperature enters the condenser. The condenser removes heat from the refrigerant, lowers its temperature, and changes it to a liquid. At point no. 2, the liquid leaves the condenser and enters a fixed expansion device that lowers the pressure of the refrigerant. At point no. 3, the liquid enters the evaporator coil, where the refrigerant increases in temperature and changes back to a vapor. At point no. 4, the vapor leaves the evaporator and reenters the compressor.

#### Refrigerant Cycle Using Perfect Humidity Dehumidification Package

When a subcooler coil is added to the rooftop unit, the refrigerant is affected in such a way that the unit latent capacity is increased. The refrigerant cycle follows the same path from point no. 1 to point no. 2 as the standard refrigerant cycle without a subcooler (see the pressure enthalpy curve). However, at point no. 2, the liquid refrigerant enters the subcooler coil where the temperature is lowered further. At point no. 2A, this subcooled liquid enters the TXV, which drops the pressure of the liquid. At point no. 2B, the liquid enters the fixed orifice metering device. The refrigerant leaves this device as a saturated vapor and enters the evaporator at point no. 2C. The improved refrigeration effect can now be seen between point no. 2C and point no. 3. The increase in the total refrigeration effect is the additional enthalpy gained from point no. 2C to point no. 3. However, the subcooler coil rejects this added refrigeration effect to the air downstream of the evaporator coil, thus maximizing the overall latent effect. This improved latent effect is a direct result of the addition of the Perfect Humidity subcooler coil to the refrigerant cycle.

#### Latent Capacity Effects

Refer to the psychrometric chart to see how the sensible heat factor decreases when the optional Perfect Humidity dehumidification package is installed. This chart contains data for the 5-ton 551B unit operation, both with and without the Perfect Humidity package, at 1750 cfm. Point no. 1 on the chart represents the return-air dry bulb (80 F) and wet bulb (67 F) conditions. Point no. 2 represents the supply-air conditions for a standard 551B rooftop unit without the Perfect Humidity dehumidification package. Point no. 3 represents the supply-air conditions for a 551B rooftop unit with the Perfect Humidity package. By connecting point no. 1 and point no. 2 on the chart and finding the intersection on the sensible heat factor scale, the sensible heat factor is 0.73. Connect point no. 1 and point no. 3, and see that the sensible heat factor is 0.58. This is a 17.5% increase in latent capacity for the given conditions. This increase in latent capacity allows the 551B rooftop units to remove more moisture from the conditioned space; thus lowering the humidity levels.

#### Dehumidification Effects

Further evidence of dehumidification can be seen by analyzing the pounds of water per pound of dry air found in the supply air. At point no. 2 in the psychrometric chart, there are 65 grains (0.0092 lb) of moisture per pound of dry air. At point no. 3, there are 58 grains (0.0083 lb) of moisture per pound of dry air. This is a 12.1% decrease in the amount of water in the supply air.

## APPLICATION DATA (cont)

### 15. PERFECT HUMIDITY™ DEHUMIDIFICATION PACKAGE OPERATING PERFORMANCE — Perfect Humidity dehumidification package operation does not affect the electrical data. The electrical data remains the same either with or without the Perfect Humidity package.

The operating and shipping weights will be slightly increased with the addition of the Perfect Humidity subcooler. See the Physical Data table for added base unit weight with this option.

Refer to cooling performance data, both with and without the Perfect Humidity dehumidification package. Note the greatly improved latent capacity with the Perfect Humidity dehumidification package.

Static pressure is also slightly affected by the addition of the Perfect Humidity dehumidification package. See Static Pressure Drop table on page 43 when using this option.

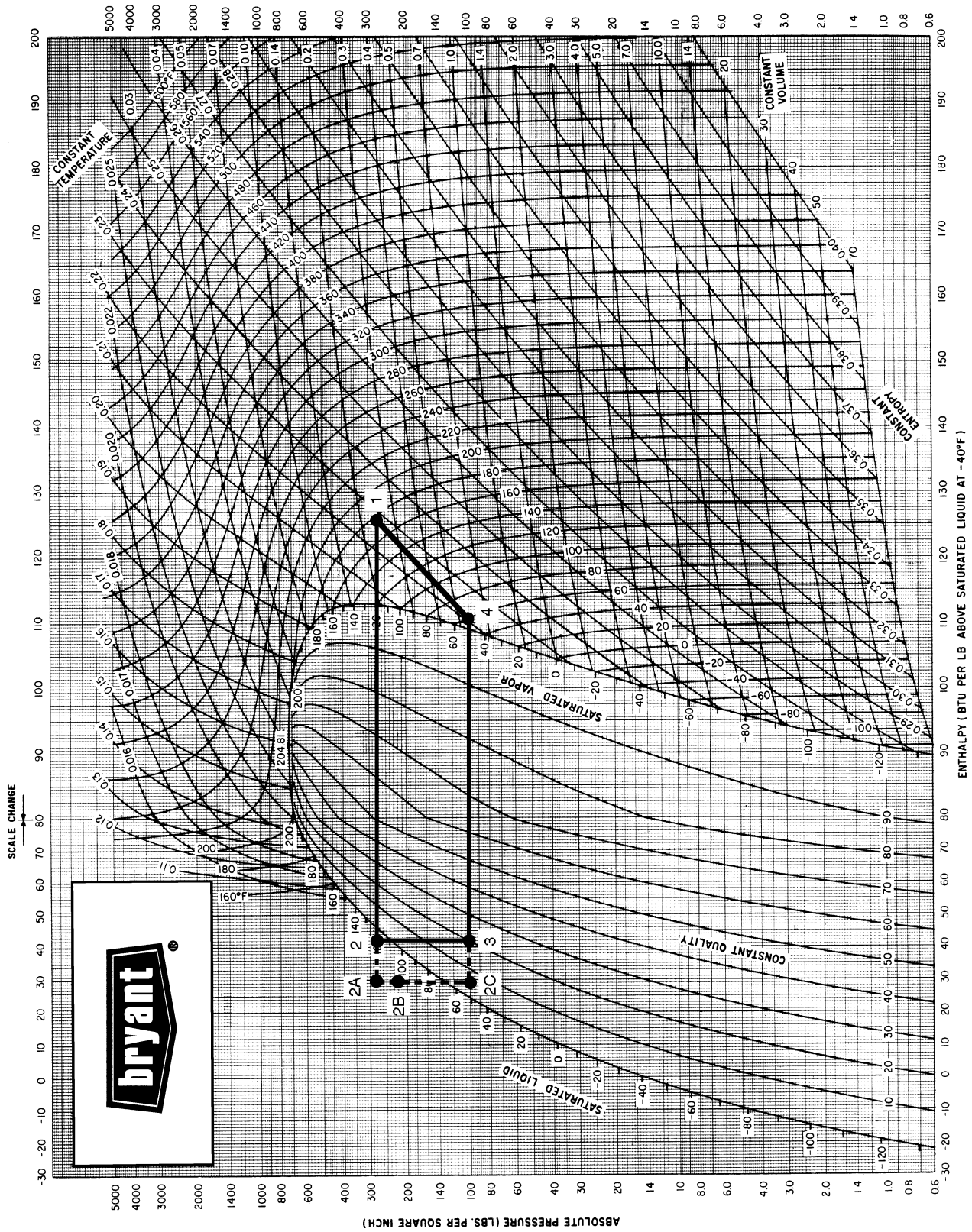
### 16. PERFECT HUMIDITY DEHUMIDIFICATION PACKAGE FEATURES AND BENEFITS

- The Perfect Humidity dehumidification package can improve the humidity control of your rooftop equipment by up to 40%. This greatly reduces the risk of sick building syndrome by reducing biological growth in both ductwork and the rest of the building.
- The Perfect Humidity dehumidification package improves comfort levels in the building by better controlling the humidity. This improved comfort level allows building tenants to raise the cooling set point on the thermostats for accumulated energy savings.
- Better humidity control lowers the risk of humidity-induced property damage.
- The Perfect Humidity dehumidification package permits building refrigerators and freezers to operate more efficiently due to lower relative humidity levels. This is the perfect solution for supermarket applications.
- The Perfect Humidity subcooling circuit can be operated by a humidity sensor. If the sensor is used, the Perfect Humidity circuit will then only operate when needed. If the humidity levels in the occupied space are acceptable (such as in the spring and fall seasons), the Perfect Humidity circuit will not operate. The rooftop unit is then able to operate to its full sensible potential, which provides more efficient performance and energy savings.

- At lower outdoor temperatures, rooftop units with dehumidification devices are subject to low suction pressure conditions. The Perfect Humidity dehumidification package contains a low-pressure switch that deactivates the Perfect Humidity dehumidification package under low suction pressure conditions without deactivating the compressors.
- Improved humidity control allows increased outdoor-air ventilation in hot and humid geographical areas. Humidity control also helps to improve the indoor-air quality of the building.
- The Perfect Humidity dehumidification package is factory installed. There are no additional field installation costs. There is also no need to purchase a roof curb from another manufacturer, as standard Bryant roof curbs will accommodate the 551B rooftop units which have the Perfect Humidity dehumidification package option installed.
- The Perfect Humidity dehumidification package is engineered and manufactured by Bryant for Bryant rooftop units. All application support, service, and warranty issues can therefore be handled through one company.
- The slightly lower sensible capacities obtained when using the Perfect Humidity dehumidification package allow the unit to operate for an extended period of time. The more the unit operates, the more air is exposed to the subcooling coil. This rooftop unit increased latent capacity results in lower relative humidity levels in the occupied space.
- It is no longer necessary to oversize equipment and add reheat devices to properly dehumidify your building. In a typical scenario, a building owner may need 39,000 Btuh of sensible capacity and 23,000 Btuh of latent capacity (62,000 total Btuh). To accomplish this without the Perfect Humidity dehumidification package, a 7<sup>1</sup>/<sub>2</sub>-ton unit with a reheat device would be necessary to attain the higher latent capacity required. This results in a large up-front expense to oversize the equipment from a standard 5-ton to a 7<sup>1</sup>/<sub>2</sub>-ton unit.

The building owner can now purchase a 5-ton unit with the Perfect Humidity dehumidification package for a small additional up-front charge, and no reheat device will be necessary to satisfy the cooling requirements. This reduces both installation costs and operating costs throughout the life of the product.

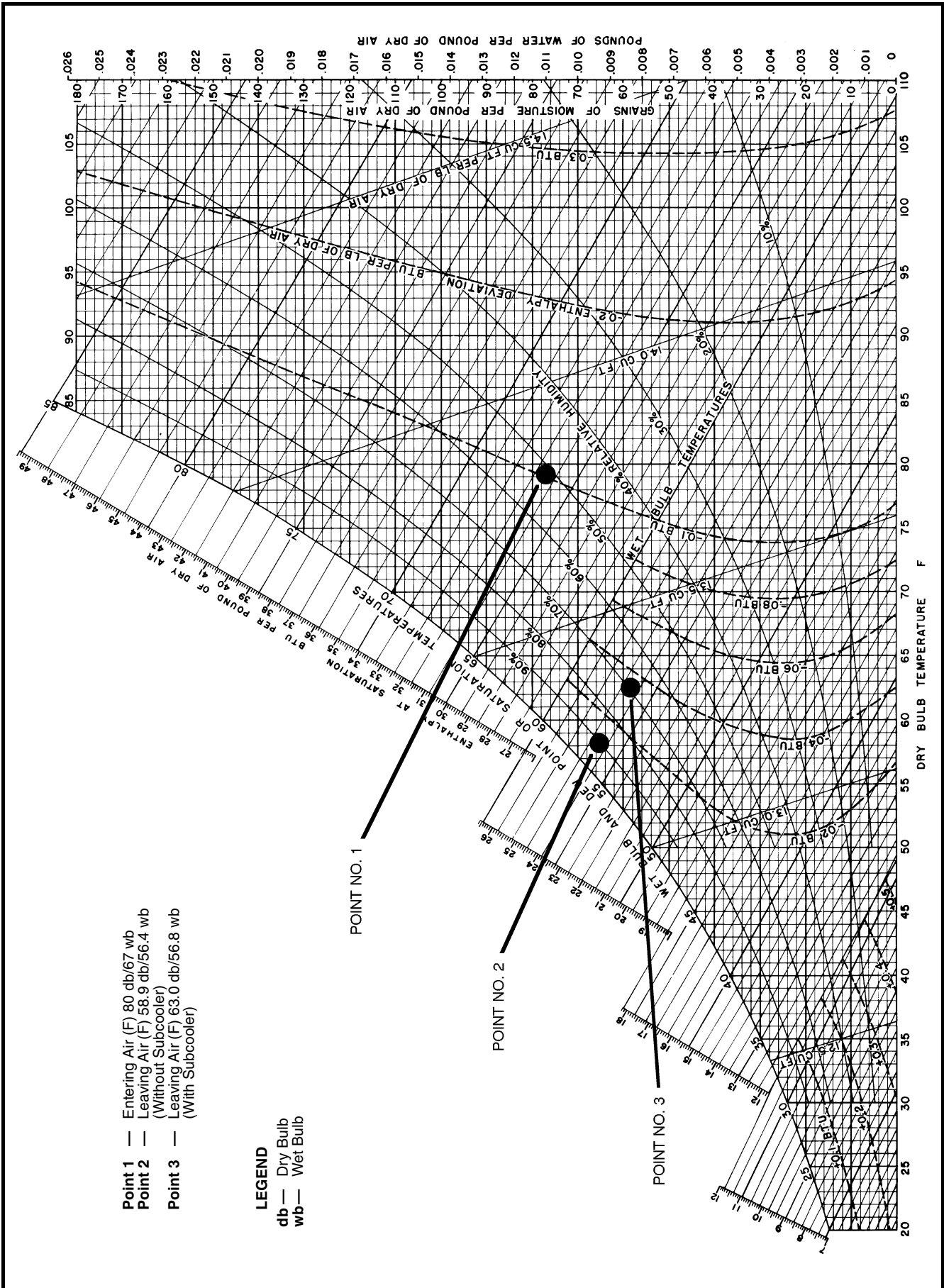
# APPLICATION DATA (cont)



**NOTE:** Numbers 1 through 4 indicate point numbers referred to in Perfect Humidity™ Dehumidification Package Design Effects section.

## Pressure Enthalpy Curve

# APPLICATION DATA (cont)



Psychrometric Chart (551B072 Shown)

## GUIDE SPECIFICATIONS

### PACKAGED ROOFTOP COOLING UNIT WITH ELECTRIC HEAT OPTION — CONSTANT VOLUME APPLICATION

#### HVAC GUIDE SPECIFICATIONS

SIZE RANGE: 3 to 12<sup>1</sup>/<sub>2</sub> TONS, NOMINAL COOLING

BRYANT MODEL NUMBER: 551B

#### PART 1 — GENERAL

##### 1.01 SYSTEM DESCRIPTION

Outdoor rooftop- or slab-mounted, electrically controlled cooling unit with optional heat utilizing a scroll compressor for cooling duty and electric resistance coils for heating duty. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.

##### 1.02 QUALITY ASSURANCE

- A. Unit shall be rated in accordance with ARI Standards 210/240 or 360 and 270.
- B. Unit shall be designed to conform to ASHRAE 15, latest revision, and in accordance with UL 1995.
- C. Unit shall be UL tested and certified in accordance with ANSI Z21.47 Standard and UL listed and certified under Canadian Standards as a total package for safety requirements.
- D. Roof curb shall be designed to conform to NRCA Standards.
- E. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
- F. Unit casing shall be capable of exceeding Federal Test Method Standard No. 141 (Method 6061) 500-Hour Salt Spray Test.
- G. Each 551B unit is subjected to completely automated run testing on the assembly line. Each unit contains a factory-supplied printout indicating tested pressures, amperages, data, and inspectors; providing certification of the unit status at the time of manufacture.

##### 1.03 DELIVERY, STORAGE, AND HANDLING

Unit(s) shall be stored and handled per manufacturer's recommendations.

#### PART 2 — PRODUCTS

##### 2.01 EQUIPMENT (STANDARD)

###### A. General:

Factory-assembled, single-piece cooling unit with optional heat. Contained within the unit enclosure shall be all factory wiring, piping, controls, refrigerant charge (R-22), and special features required prior to field start-up.

###### B. Unit Cabinet:

1. Unit cabinet shall be constructed of galvanized steel, bonderized and coated with a baked enamel finish on all externally exposed surfaces, and have primer-coated interior panel surfaces.
2. Evaporator fan cabinet interior shall be insulated with a minimum 1/2-in. thick flexible fiberglass insulation coated on the air side.
3. Cabinet panels shall be easily removable for servicing.
4. Holes shall be provided in the base rails for rigging shackles to facilitate overhead rigging, and forklift slots shall be provided to facilitate maneuvering.
5. Unit shall have a factory-installed, sloped condensate drain pan made of a non-corrosive material, providing a minimum 3/4-in. connection with both vertical and horizontal drains and shall comply with ASHRAE 62.

6. Unit shall have factory-installed filter access panel to provide filter access with tool-less removal.
7. Unit shall have standard thru-the-bottom power connection capability.

###### C. Fans:

1. Indoor blower (evaporator fan) shall be of the belt-driven, double inlet, forward-curved centrifugal type. Belt drive shall include an adjustable-pitch motor pulley.
2. Indoor blower (evaporator fan) shall be made from steel with a corrosion-resistant finish and shall be dynamically balanced.
3. Bearings shall be of the sealed, permanently lubricated, ball-bearing type for longer life and lower maintenance.
4. Condenser fan shall be of the direct-driven propeller type and shall discharge air vertically.
5. Condenser fan shall have blades riveted to corrosion-resistant steel spiders and shall be dynamically balanced.
6. Condenser-fan motor shall be totally enclosed.

###### D. Compressor(s):

1. Scroll type, internally protected.
2. Factory rubber-shock mounted and internally spring mounted for vibration isolation.
3. On independent circuits (090-150).

###### E. Coils:

1. Evaporator and condenser coils shall have aluminum plate fins mechanically bonded to enhanced copper tubes with all joints brazed.
2. Tube sheet openings shall be belled to prevent tube wear.
3. Evaporator coil shall be of the face-split design (090-150).

###### F. Refrigerant Components:

Refrigerant circuit components shall include:

1. Fixed orifice metering feed system.
2. Refrigerant filter drier.
3. Service gage connections on suction, discharge, and liquid lines.
4. Ability to route gage hoses through unit top cover or outdoor panel.

###### G. Filter Section:

1. Standard filter section shall consist of factory-installed low-velocity, throwaway 2-in. thick fiberglass filters of commercially available sizes.
2. Filter face velocity shall not exceed 320 fpm at nominal airflows.
3. Filter section shall use only one size filter.
4. Filters shall be accessible through an access panel with "no-tool" removal.

###### H. Controls and Safeties:

###### 1. Unit Controls:

Unit shall be complete with self-contained low-voltage control circuit protected by a fuse on the 24-v transformer side.

###### 2. Standard Safeties:

- a. Unit shall incorporate compressor overtemperature and overcurrent safety devices to shut off compressor.

## GUIDE SPECIFICATIONS (cont)

- b. Heating section shall be provided with the following minimum protections:
  - 1) High-temperature limit switches.
  - 2) Overcurrent protection.
- c. High-pressure switch.
- d. Low-pressure switch.
- e. Freeze protection thermostat.

### I. Operating Characteristics:

- 1. Unit shall be capable of starting and running at 125 F ambient outdoor temperature, meeting maximum load criteria of ARI Standard 210/240 or 360 at  $\pm 10\%$  voltage.
- 2. Compressor with standard controls shall be capable of operation down to 25 F ambient outdoor temperature.

### J. Electrical Requirements:

All unit power wiring shall enter unit cabinet at a single factory-predrilled location.

### K. Motors:

- 1. Compressor motors shall be cooled by refrigerant passing through motor windings and shall have line break thermal and current overload protection.
- 2. Indoor blower (evaporator-fan) motor shall have permanently lubricated bearings and inherent automatic-reset thermal overload protection.
- 3. Totally enclosed condenser-fan motor shall have permanently lubricated bearings and inherent automatic-reset thermal overload protection.

### L. Heating Section:

- 1. May be equipped with field-installed electric resistance heater(s) of the characteristics shown in the equipment schedule.
- 2. Heater elements shall be open wire type, adequately supported and insulated with ceramic bushings.

### M. Special Features:

Certain features are not applicable when the features designated by \* are specified. For assistance in amending the specifications, contact your local Bryant Sales Office.

#### 1. Roof Curbs:

- a. Formed galvanized steel with wood nailer strip and capable of supporting entire unit weight.
- b. Allows for installing and securing ductwork to curb prior to mounting unit on the curb.

#### \* 2. Integrated Economizers:

- a. Integrated integral-modulating type capable of simultaneous economizer and compressor operation.
- b. Includes all hardware and controls to provide cooling with outdoor air.
- c. Equipped with low-leakage dampers not to exceed 3% leakage, at 1 in. wg pressure differential (Durablade economizer).
- d. Capable of introducing up to 100% outdoor air in both minimum and fully open positions.
- e. Equipped with a gravity relief sliding plate damper (Durablade economizer). Damper shall close upon unit shutoff.
- f. EconoMi\$er shall be equipped with a barometric relief damper with up to 100% of return air (036-072) or 90% of return air (090-150) relief. The Durablade economizer is equipped with 30% of return-air relief (036-150).

- g. Designed to close damper during loss-of-power situations with emergency power supply (Durablade economizer) or spring return built into motor (EconoMi\$er).
- h. Dry bulb outdoor-air thermostat protection shall be provided as standard.
- i. Durablade economizer is a guillotine-style damper, and the EconoMi\$er is a parallel blade design.

#### 3. 50% Manual Outdoor-Air Damper:

Manual damper package shall consist of damper, birdscreen, and rainhood which can be preset to admit up to 50% outdoor air for year-round ventilation.

#### 4. 25% Manual Outdoor-Air Damper:

Manual damper package shall consist of damper, birdscreen, and rainhood which can be preset to admit up to 25% outdoor air for year-round ventilation.

#### 5. 100% Two-Position Damper:

- a. Two-position damper package shall include single blade damper and motor. Admits up to 100% outdoor air.
- b. Damper shall close upon indoor (evaporator) fan shutoff.
- c. Designed to close damper during loss of power situations.
- d. Equipped with 15% barometric relief damper.

#### 6. 25% Two-Position Damper:

- a. Two-position damper package shall include single blade damper and motor. Admits up to 25% outdoor air.
- b. Damper shall close upon indoor (evaporator) fan shutoff.

#### 7. Solid-State Enthalpy Control:

Capable of sensing outdoor-air enthalpy content (temperature and humidity) and controlling economizer cut-in point to have minimum heat content air passing over the evaporator coil for most efficient system operation.

#### 8. Differential Enthalpy Sensor:

- a. For use with economizer only.
- b. Capable of comparing enthalpy content (temperature and humidity) of outdoor and indoor air and controlling economizer cut-in point at the most economical level.

#### 9. Electric Resistance Heaters and Single Point Kits:

- a. Open wire nichrome elements with all necessary safety operating controls.
- b. UL listed and indicated on basic unit informative plate.
- c. Available in multiples to match heating requirements.
- d. Single point kits available for each heater when required.

#### 10. Low Ambient Control Packages:

Each package consists of condenser-coil temperature sensor to maintain condensing temperature between 90 F and 110 F at outdoor ambient temperatures down to -20 F by condenser-fan speed modulation or condenser-fan cycling.

## GUIDE SPECIFICATIONS (cont)

11. Thermostat and Subbase:  
Provides staged cooling and heating automatic (or manual) changeover, fan control, and indicator light.
12. Thru-The-Bottom Service Connectors:  
Kit shall provide connectors to permit electrical connections to be brought to the unit through the basepan.
- \* 13. Electronic Programmable Thermostat:  
Capable of using deluxe full-featured electronic thermostat. Shall use built-in compressor cycle delay control for both heating and cooling duty.
14. Condenser Coil Hail Guard Assembly:  
Hail guard shall protect against damage from hail and flying debris.
- \* 15. High-Static Motor and Drive (036-120 only):  
High static motor and drive shall be factory-installed to provide additional performance range.
16. Condenser Coil Grille:  
The grille protects the condenser coil from damage by large objects without increasing unit clearances.
- \* 17. Compressor Cycle Delay:  
Unit shall be prevented from restarting for a minimum of 5 minutes after shutdown.
18. Fan/Filter Status Switch:  
Provides status of evaporator fan (ON/OFF) or indoor-air filter (CLEAN/DIRTY). Status shall be displayed with an indicator light at the thermostat.
- \* 19. Unit-Mounted, Non-Fused Disconnect Switch:  
Shall be factory-installed, internally mounted, NEC and UL approved non-fused switch shall provide unit power shutoff. Shall be accessible from outside the unit and shall provide power off lockout capability. (Cannot be used with units rated over 80 amps.)
- \* 20. Convenience Outlet:  
Shall be factory-installed and internally mounted with easily accessible 115-v female receptacle. Shall include 15 amp GFI receptacle with independent fuse protection. Voltage required to operate convenience outlet shall be provided by a factory-installed step-down transformer. Shall be accessible from outside the unit.
21. EconoMi\$er and Power Exhaust:  
EconoMi\$er shall utilize a micro-processor based control and a gear driven damper system. EconoMi\$er shall provide controls and spring return on power loss. The system shall exhaust up to 100% of the return air (vertical applications only).
22. Power Exhaust for Accessory EconoMi\$er:  
Two two-stage power exhaust shall be used in conjunction with EconoMi\$er to provide the system with the capability to exhaust up to 100% of return air. The power exhaust is a field-installed accessory for vertical and horizontal applications.
- \* 23. Dehumidification Package:  
The dehumidification package is a factory-installed option that provides increased dehumidification by further subcooling the hot liquid refrigerant leaving the condenser coil. The package consists of a subcooling coil located on the leaving-air side of the evaporator coil. The location of this coil in the indoor airstream greatly enhances the latent capacity of the 551B units.  
  
The package shall be equipped with crankcase heater(s), low pressure switch(es), and TXV(s). Low pressure switch(es) prevents evaporator coil freeze up and TXV(s) assure a positive superheat condition. If the operation of the subcooling coil is controlled by a field-installed, wall-mounted humidistat, the dehumidification circuit will then operate only when needed. Optional field connections for the humidistat are made in the low voltage compartment of the unit control box.
24. Humidistat:  
Field-installed, wall-mounted humidistat is used to control activation of the dehumidification package. The humidistat can be set for humidity levels between 20% and 80% relative humidity.
25. Light-Commercial Thermidistat:  
Field-installed, wall mounted thermidistat is used to control temperature and activation of Perfect Humidity™ package. The thermidistat can be set for humidity settings from 50% to 90% relative humidity.
- \* 26. Hinged Panel Option:  
Shall be equipped with hinged access panels for the filter, compressor, evaporator fan, and control box areas. Filter hinged access panels permit tool-less entry for changing filters. Each hinged access panel is permanently attached to the rooftop unit.
27. Outdoor-Air Enthalpy Sensor:  
The outdoor air enthalpy sensor shall be used with the EconoMi\$er device to provide single enthalpy control. When used in conjunction with a return air enthalpy sensor, the EconoMi\$er device will provide differential enthalpy control. the sensor allows the EconoMi\$er controller to determine if outside air is suitable for free cooling.
28. Return-Air Enthalpy Sensor:  
The return air enthalpy sensor shall be used with the EconoMi\$er device. When used in conjunction with an outdoor air enthalpy sensor, the EconoMi\$er device will provide differential enthalpy control.
29. Return-Air Temperature Sensor:  
The return-air temperature sensor shall be used with the EconoMi\$er device. When used in conjunction with an outdoor-air temperature sensor, the EconoMi\$er device will provide differential temperature control.
30. Indoor-Air Quality (CO<sub>2</sub>) Sensor:  
Shall have the ability to provide demand ventilation indoor-air quality (IAQ) control through the EconoMi\$er with an IAQ sensor.  
  
The IAQ sensor shall be available in duct mount, wall mount and wall mount with LED display. The set point shall have adjustment capability.



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE  
UNIT MUST BE INSTALLED IN ACCORDANCE  
WITH INSTALLATION INSTRUCTIONS